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Tabulation of Data on Semiconductor Amplifiers and Oscillators at Microwave Frequencies

U.S.
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Tabulation of Data on Semiconductor Amplifiers and Oscillators at Microwave Frequencies

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FOREWORD

This tabulation of data on semiconductor amplifiers and oscillators at microwave frequencies has been prepared by the National Bureau of Standards Electron Devices Data Service. Established in 1948 to provide technical data on electron tubes to members of the Bureau staff, the service has since been extended to include other scientists and engineers in government and industry. In the course of the program, a large volume of information on electron tubes and semiconductor devices has been accumulated on punched cards. In order to make this information more readily available, a system was devised for automatically tabulating the data in handbook form. Present tabulations include Tabulation of Data on Microwave Tubes, NBS Handbook 104 (1967); Tabulation of Data on Receiving Tubes, NBS Handbook 103 (1967); Tabulation of Data on East European Electron Devices, NBS Report 9925 (1968); and Tabulation of Published Data on Soviet Electron Devices Through October 1967, NBS Technical Note 441, presently being updated.

All the included information has been taken from the manufacturers technical specifications, and every effort has been made to ensure accuracy and completeness. However, the Bureau cannot assume responsibility for omissions nor for results obtained with these data.

CONTENTS

		Page
1.	Introduction	1
2.	Organization of the Tabulation	1
3.	Sorting and Explanation of the Code	2
	3.1 Code Terminology	2
4.	Alphabetical-Numerical Listing	5
5.	Characteristic Listing	34

Tabulation of Data on Semiconductor Amplifiers and Oscillators at Microwave Frequencies

This tabulation includes some of the basic characteristics of semiconductor microwave devices, specifically amplifiers and oscillators of foreign and domestic origin.

Key Words. solid-state, microwave, amplifiers, oscillators, basic characteristics.

1. Introduction

With the increased use of semiconductor microwave devices as supplements to microwave tubes, it has become apparent that a listing of basic characteristics of such devices would assist the potential user in selecting a device to fulfill his requirements. The listing includes typical devices offered by the manufacturers. Since a great number of these devices are custom-made, it would not be feasible to include every type known to be available, but rather, we have endeavored to tabulate data on off-the-shelf items as supplied by the various manufacturers.

Almost any electrical or mechanical variant of a basic design will be provided according to customer specifications since the present state of the production art encourages custom-made devices. For this reason it should be kept in mind that this tabulation is meant to serve only as a guide in the preliminary selection of semiconductor microwave devices. Technical assistance from the manufacturer will be necessary regarding mechanical modifications and changes in electrical parameters for most applications.

The tabulation consists of the basic electrical and mechanical characteristics of semiconductor microwave devices, specifically those devices categorized as amplifiers and oscillators. Some applications for these devices include telemetry, radar, communications and satellite systems or other applications requiring small sized, light-weight devices capable of withstanding stringent environmental conditions such as temperature, high G, etc.

2. Organization of the Tabulation

The semiconductor microwave devices tabulation consists of two principal sections as follows:

(1) Alphabetical-Numerical Listing. In this, the device designations are arranged in alphabetical-numerical sequence.

(2) Characteristic Listing. In this, the devices are separated into basic groups, e.g., amplifiers, oscillators, and others and then ordered primarily by minimum frequency and secondarily by power output.

3. Explanation of the Code

Definitions of terms and explanation of the code used in the tabulation, follows.

3.1 Code Terminology

The Alphabetical-Numerical Listing and the Characteristic Listing are in tabular form, consisting of 16 columns. The headings of these columns and their meanings are given below.

A blank in any column indicates that the characteristic designated by that column heading is not applicable to the device in question, or that no value was given in the available data.

Type Number. The alphabetical-numerical designation assigned by the manufacturer.

Device Type. A three-letter code describing the application and/or structure as indicated by the manufacturer.

ADO	Avalanche Diode Oscillator	OSX	Crystal Oscillator
AMM	Amplifier/Multiplier	PAR	Parametric Amplifier
AMP	Amplifier	PRE	Preamplifier
GOS	Gunn-Effect Oscillator	TDA	Tunnel-Diode Amplifier
IPO	Impatt Oscillator	TDO	Tunnel-Diode Oscillator
MIA	Mixer and Amplifier	TOM	Transistor Oscillator and Multiplier
MUL	Multiplier	TOS	Transistor Oscillator
OAM	Octave Amplifier	TPA	Transistor Power Amplifier
OSC	Oscillator		

Frequency. Both minimum and maximum frequency of operation in gigahertz. Only devices having a minimum frequency of operation above 200 MHz have been included in this tabulation.

*	preceding frequency indicates that the tabulated value is the center frequency.

Tuning Method. The method of frequency tuning is indicated by the following code:

FX	Fixed tuned
MC	Mechanically tuned
ME	Mechanically and electrically tuned
VT	Voltage tuned.

Bandwidth. The frequency difference between half-power points for amplifier devices or the electronic tuning range for oscillator devices.

Power Input. Typical required voltage and maximum current in mA.

Power Output. The minimum output in mW.

(*)	indicates power output in dBm.
(U)	indicates a change in unit from mW to microwatts.
(W)	indicates a change in unit from mW to watts.

Gain. The maximum gain for amplifiers in decibels.

NF. The typical noise figure in decibels.

Operating Temperature. The stated permissible range in ambient temperature over which the device operates.

Volume. The typical volume of the device in cubic inches (excluding connectors).

Weight. The weight of the device as a general indication only and may or may not include connectors.

/	preceding the value indicates a value less than the tabulated value
H	preceding the value indicates hundreds, e.g., H 1.5 = 150 ounces.

Manufacturer.

AC	Acrodyne Industries
AD	Advanced Technology Corporation (ADTEC)
AE	Aertech
AI	Alpha Industries, Inc.
AL	American Electronic Laboratories, Inc.
AP	Applied Technology, Inc.
AR	Applied Research
AS	Addington Laboratories
AT	Airtron, Division of Litton Industries
AV	Avantek, Inc.
CA	Cayuga Associates
CL	Centilabs
CM	California Microwave
EF	EMF Systems, Inc.
EM	E & M Laboratories
FE	Ferranti Ltd.
FR	Frequency Sources
FS	Fairchild Microwave Products
GC	General Electric Co., Ltd.

HA	Hughes Aircraft, Inc.
HP	Hewlett Packard
IM	International Microwave Corporation
IS	Intradyne Systems
KS	Kruse Storke
LO	Locus, Inc.
MA	Microwave Associates, Inc.
MD	Microwave Power Devices, Inc.
ML	Melabs
MM	Micromega Corporation
MP	Microwave Products Group
MS	Microstate Electronics Corporation (a subsidiary of Raytheon Co.)
MO	Monsanto
MU	Mullard Ltd. Industrial Electronics Div.
OK	OKI Electronics of America, Inc.
OP	Optimax, Inc.
OS	Omni Spectra, Inc.
PE	Physical Electronics Labs
PL	Philco Special Products Operation
RC	Radio Corporation of America, Electronic Components and Devices
RH	RHG Electronics Lab, Inc.
SE	Sonoma Engineering & Research, Inc.
SK	Spacekom, Inc.
SP	Sperry Microwave Components
SS	Somerset Radiation Laboratory, Inc.
SY	Sylvania Electric Components Group
TC	Texscan Corporation
TR	Trak Microwave Corporation
UA	United Aircraft-Electronic Components
VA	Varian Solid-State Microwave Operation
WJ	Watkins-Johnson Company
ZL	Zeta Laboratories, Inc.

4. ALPHABETICAL-NUMERICAL LISTING

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-Pc	(+Pc	in^3	oz.	
A4720	TPA	1.0	2.0			15	120		26	/7	54	71	/9	12.0	AE
A4721	TPA	1.0	2.0			15	140		32	/7	54	71	10	14.0	AE
A4722	TPA	1.0	2.0			15	160		40	/7	54	71	12	16.0	AE
A4727	TPA	1.0	2.6			20	140	*6	20	7	54	71	8	12.0	AE
A4809	TPA	1.0	2.6			20	160	*6	28	7	54	71	8	14.0	AE
A5602	TPA	2.2	2.3					2	20	6				/0.8	AE
A5706	TPA	2.2	2.3			20	65	*12	20	/7	54	71	/9	7.0	AE
A5802	TPA	2.0	3.5			20	160	*8	20	10	54	71	8	13.0	AE
A5804	TPA	2.0	4.0			20	190	*8	20	11	54	71	9	15.0	AE
AD-SERIES	IPD	8.0	12.0			90	70	50					/2	8.0	OK
AD-10 SERIES	IPD	8.2	12.4	MC		95	40	60			30	70	/2		OK
AFM4-350	AMM	*0.3			50	28	80	20			30	60	60	48.0	MM
AFM40-10400	AMM	*10.4			300	28	100	5					30	40.0	MM
AFM54-6600	FAR	*6.6			500	28	400	50					/85	56.0	MM
AFM60-7100	AMM	*7.1			500	28	400	20					/85	56.0	MM
AFM192-4175	AMM	*4.1			150	24	150	10					30	24.0	MM
AFM96-6300	AMM	*6.3			200	20	300	20					40	48.0	MM
AFO36	OSC	3.6	3.9	MC		20	300	10			30	60	9		AT
AFO36H	OSC	3.6	3.9			20	300	50			30	60	9		AT
AFO38	OSC	3.8	4.2	MC		30	300	10			30	60	9		AT
AFO38H	OSC	3.8	4.2			20	300	50			30		9		AT
AFO41	OSC	4.1	4.4	MC		20	300	10			30	60	9		AT
AFO41H	OSC	4.1	4.4			20	300	50			30	60	9		AT
AFO43	OSC	4.3	4.9	MC		20	300	10			30	60	9		AT
AFO43H	OSC	4.3	4.9			20	300	50			30	60	9		AT
AFO54	OSC	5.4	5.9	MC		20	300	10			30	60	9		AT
AFO54H	OSC	5.4	5.9			20	300	50			30	60	9		AT
AFO58	OSC	5.8	6.4			20	300	10			30	60	9		AT
AFO58H	OSC	5.8	6.4			20	300	50			30	60			AT
AFO64	OSC	6.4	6.9			20	300	10			30	60	9		AT
AFO64H	OSC	6.4	6.9			20	300	50			30	60	9		AT
AFO68	OSC	6.8	7.2			20	300	10			30	60	9		AT
AFO70	OSC	7.0	7.5			20	300	10			30	60	9		AT
AFO75	OSC	7.5	8.0			20	300	10			30	60	9		AT
AFO79	OSC	8.0	8.5			20	300	10			30	60	9		AT
AFO106	OSC	10.6	11.2			20	300	10			30	60	9		AT
AFO112	OSC	11.2	11.8			20	300	10			30	60	9		AT
AFO116	OSC	11.6	12.2			20	300	10			30	60	9		AT
AFO121	OSC	12.1	12.7			20	300	10			30	60	9		AT
AFO126	OSC	12.6	13.2			20	300	10			30	60	9		AT
AFO131	OSC	13.1	13.8			20	300	10			30	60	9		AT
AFO136	OSC	13.6	14.2			20	300	10			30	60	9		AT
AG20	TPA	0.2	0.4			+15	25	2	28	2		85	/7	6.0	AV
AG25	TPA	0.2	0.5			+15	25	2	28	2		85	/7	6.0	AV
AG25M	TPA	0.3	0.5			15	25	*0	24	/3					AV

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
A2-30-267	TPA	*0.3			32	28	/1A	2W							MM
A3-30-387	TPA	*0.4			30	28	/1A	3W							MM
A5-20-100	TPA	*0.1			22	28	/1A	5W							MM
A5-25-470	TPA	*0.5			25	28	/1A	/0W							MM
A5-25-500	TPA	*0.5			20	28	/1A	5W							MM
A5-30-200	TPA	*0.2			32	28	/1A	5W							MM
A6-40-289	TPA	*0.3			40	28	/1A	6W							MM
A6-100-800	TPA	*0.8			100	28	/1A	6W							MM
A6-100-850	TPA	*0.9			100	28	/1A	6W							MM
A6-100-900	TPA	*0.9			100	28	/1A	6W							MM
A13-30-144	TPA	*0.1			28	28	/1A	13W							MM
A-32D2	AMP	0.3	0.6			24		20		5	54	71	/10	12.0	OP
A52D2	AMP	0.5	1.0			24		20		6	54	71	/10	12.0	OP
A154N	AMP	1.4	1.5			24		10		/5	54	71	/10	12.0	OP
A172N	AMP	1.7	1.7			24		10		/6	54	71	/10	12.0	OP
A185N	AMP	1.7	1.9			24		5		/6	54	71	/10	12.0	OP
A230N	AMP	2.2	2.3			24		5		6	54	71	/10	12.0	OP
A-245	AMP	0.2	0.5		15	28		75W	30				/8	10.0	AC
A251D2	AMP	0.3	0.5			24		20		5	54	71	/10	12.0	OP
A251D4	AMP	0.3	1.0			24		10		8	54	71	/10	12.0	OP
A551D2	AMP	0.6	1.1			24		20		6	54	71	/10	12.0	OP
A-2001	AMP	0.1	2.0		20	15M			10		50	70	28		AC
A-2004	AMP	0.1	0.5			28		10W	30		40	55	/5		AC
A-2005	AMP	0.1	0.5			28		40W	30		10	50	/8		AC
A2301H	TPA	0.2	0.3					316	30	4				/0.8	AE
A2301L	TPA	0.2	0.3					2	20	3				/0.8	AE
A2325	TPA	0.3	0.4					6	30	2				/0.8	AE
A2334	TPA	0.2	0.3					2	20	3				/0.8	AE
A2410L	TPA	0.2	0.5					1	15	4				/0.8	AE
A2511	TPA	0.2	0.5					20	25	5				/0.8	
A2615H	TPA	0.2	0.3					80	20	6				/0.8	AE
A3510L	TPA	0.5	1.0					1	15	4				/0.8	AE
A3516L	TPA	0.3	1.0					1	30	6				/0.8	AE
A3522L	TPA	0.6	0.8					1	15	4				/0.8	AE
A3602L	TPA	0.3	1.0					1	20	6				/0.8	AE
A3808L	TPA	0.5	1.0					2	25	4				/0.8	AE
A4503	TPA	1.4	1.5					2	20	5				/0.8	AE
A4608	TPA	1.6	2.0					2	20	5				/0.8	AE
A4611	TPA	1.0	2.0					*-8	15	6				/0.8	AE
A4612	TPA	1.0	2.0					*-8	20	6				/0.8	AE
A4636	TPA	1.0	2.0			15	25		16	6	54	55	6	12.0	AE
A4637	TPA	1.0	2.0			15	75		20	6	54	55	6	12.0	AE
A4638	TPA	1.0	2.0			15	90		26	6	54	55	/12	14.0	AE
A4639	TPA	1.0	2.0			15	110		32	6	54	55	13	16.0	AE
A4717	TPA	1.4	2.3			20	140	*12	20	7	54	71	8	12.0	AE
A4719	TPA	1.0	2.0			15	100		18	/7	54	71	/7	10.0	AE

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
A650	TPA	0.5	1.0			+15	25	*-3	24	4		85	/7	6.0	AV
A650M	TPA	0.5	1.0			15	25	*-6	22	4					AV
AK-SERIES	TPA	0.1	1.0			15	45	27	/3					6.0	AV
AL15	TPA	0.2	0.3			+15	25	1	26	3		95	/7	6.0	AV
AL20	TPA	0.2	0.4			+15	25	1	26	3		95	/7		AV
AL20M	TPA	0.2	0.4			15	25	*-3	24	4					AV
AL25	TPA	0.2	0.5			+15	25	2	26	3		95	/7	6.0	AV
AL25M	TPA	0.3	0.5			15	25	*-3	24	/5					AV
AL50	TPA	0.5	1.0			+12	30	4	25	7		95	/7		AV
AL50A	TPA	0.5	1.0			+12	30	4	25	5		95	/7	6.0	AV
AL50M	TPA	0.5	1.0			12	30	*3	24	6					AV
AL50M-A	TPA	0.5	1.0			12	30	*3	24	6					AV
AL70	TPA	0.7	0.9			+12	30	2	25	7		95	/7	6.0	AV
AL70M	TPA	0.7	0.9			12	30	*0	24	8					AV
ALN115	AMP	1.4	1.5			20	30	0	25	/5			/10	8.3	OP
ALN120	AMP	1.0	2.0			20	30	-10	25	6			/10	8.3	OP
ALN150	AMP	1.0	1.5			20	30	5	25	/6			/10	8.3	OP
ALN204	AMP	0.2	0.4			20	30	5	25	4			/10	8.3	OP
ALN223	AMP	2.2	2.3			20	30	0	25	/6			/10	8.3	OP
ALN255	AMP	0.3	0.5			20	30	5	25	4			/10	8.3	OP
ALN306	AMP	0.3	0.6			20	30	5	25	4			/10	8.3	OP
ALN405	AMP	0.4	0.6			20	30	5	25	4			/10	8.3	OP
ALN459	AMP	0.5	1.0			20	30	5	25	4			/10	8.3	OP
ALN501	AMP	0.5	1.0			20	30	5	25	4			/10	8.3	OP
ALN511	AMP	0.6	1.1			20	30	5	25	/6			/10	8.3	OP
ALN790	AMP	0.7	0.9			20	30	5	25	/5			/10	8.3	OP
ALN812	AMP	0.8	1.3			20	30	5	25	5			/10	8.3	OP
AM1000N	TPA	1.0	2.0			-15	30	*-6	28	5		85	/12		AV
AM1200N	TPA	1.2	1.4			-15	25	1	26	4		85	/12		AV
AM1435N	TPA	1.4	1.6			-15	25	1	28	4		85	/12		AV
AM1540N	TPA	1.4	1.5			15	50	*9	30	/5					AV
AM2200N	TPA	2.2	2.3			-15	30	1	28	6		85	11		AV
AM-4000FN	TPA	2.0	4.0			15	80	*8	30	9	54	95		9.0	AV
AM2300N	TPA	2.2	2.3			15	65	*8	30	6					AV
AM2300N-07	TPA	1.4	2.3			15	65	*6	30	6					AV
AM-4000N	TPA	2.0	4.0			15	80	*8	30	9	54	95		9.0	AV
AMH2000M SERIES	TPA	1.0	2.0			-15	100	*10		6					AV
AMH-2000M5-16	AMP	1.0	2.0			15	170	*10	48	8			24		AV
AMH2300M SERIES	TPA	1.4	2.3			-12	90	*10		/7					AV
AMP1000N	TPA	1.0	2.0			+15	60	10	27	5		85	10	14.0	AV
AMP1500N	TPA	0.5	1.5			15	60	*8	25	8					AV
AMP2300N	TPA	1.4	2.3			+15	60	8	26	6		85	10		AV
AMP2600N	TPA	1.0	2.6			+15	50	8	33	8		85	10		AV
AMP3500N	TPA	2.0	3.5			-15	125	10	26	8		85	/12		AV
AP20T	TPA	0.2	0.4			+24	250	158	31	6			16	12.0	AV
AP251	TPA	0.2	0.5			+24	250	158	31	6			16	12.0	AV

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
APU36	OSC	3.6	3.9	MC		20	400	10			30	60	38		AT
APU36H	OSC	3.6	3.9	MC		20	400	50			30	60	38		AT
APU38	OSC	3.8	4.1	MC		20	400	10			30	60	38		AT
APU38H	OSC	3.8	4.1	MC		20	400	50			30	60	38		AT
APU41	OSC	4.1	4.4	MC		20	400	10			30	60	38		AT
APU41H	OSC	4.1	4.4	MC		20	400	50			30	60	38		AT
APU43	OSC	4.3	4.9	MC		20	400	50			30	60	38		AT
APU43	OSC	4.3	4.9	MC		20	400	10			30	60	38		AT
APU43H	OSC	4.3	4.9	MC		20	400	50			30	60	38		AT
APU54	OSC	5.4	5.9	MC		20	400	10			30	60	38		AT
APU54H	OSC	5.4	5.9	MC		20	400	50			30	60	38		AT
APU58	OSC	5.8	6.4	MC		20	400	10			30	60	38		AT
APU58H	OSC	5.8	6.4	MC		20	400	50			30	60	38		AT
APU64	OSC	6.4	6.9	MC		20	400	10			30	60	38		AT
APU64H	OSC	6.4	6.9	MC		20	400	50			30	60	38		AT
APU68	OSC	6.8	7.2	MC		20	400	10			30	60	38		AT
APU70	OSC	7.0	7.5	MC		20	400	10			30	60	38		AT
APU75	OSC	7.5	8.0	MC		20	400	10			30	60	38		AT
APU79	OSC	8.0	8.5	MC		20	400	10			30	60	38		AT
APU106	OSC	10.6	11.2	MC		20	400	10			30	60	38		AT
APU112	OSC	11.2	11.8	MC		20	400	10			30	60	38		AT
APU116	OSC	11.6	12.2	MC		20	400	10			30	60	38		AT
APU121	OSC	12.1	12.7	MC		20	400	10			30	60	38		AT
APU126	OSC	12.6	13.2	MC		20	400	10			30	60	38		AT
APU131	OSC	13.1	13.8	MC		20	400	10			30	60	38		AT
APU136	OSC	13.6	14.2	MC		20	400	10			30	60	38		AT
AS1000N	TPA	1.0	2.0			-15	30	*-9		/8					AV
ASL3060	AMP	0.5	0.6			15	30	5	25	/4					EM
ATTU	ADU	5.0	10.5			110	40	100			15	55	/1	/0.4	SP
AT1000N	TPA	0.8	1.0			15	25	* 5	23	/4					AV
Av-7200M	OSC	2.0	4.0			20	125	25					/5	18.0	AV
Av-9501	GUS	8.2	12.4			10		10					/6	9.0	AV
Av-9502	GUS	8.2	12.4			11		25					/6	9.0	AV
Av-9503	GUS	8.2	12.4			13		50					/6	9.0	AV
Av-9701	ADU	8.2	12.4			6W		10		10					AV
Av-9703	ADU	8.2	12.4			12W		100		10					AV
AVU1656	ADU	8.2	12.4			10	30				25	50	1		AL
AWM-4000FN	TPA	1.0	4.0			15	80	*7	/2	10			/10	9.0	AV
AWM-4000N	TPA	1.0	4.0			15	80	*7	/2	10			/10	9.0	AV
AXU-10	OSC	1.0				28	140	50			35	90			AT
AXU-15	OSC	1.5				28	140	20			35	90			AT
AXU-35	OSC	3.5				28	140	5			35	90			AT
AXU-85	OSC	8.5				28	140	3			35	90			AT
AXU-95	OSC	9.5				28	140	3			35	90			AT
B1U-0054	IPU	10.5	10.5	FX				60				100	3	4.0	VA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
CS05	AMP	0.2	0.4			24	30		25	4					UA
CS06	AMP	0.2	0.3			24	30		25	4					UA
CS07	AMP	0.3	0.5			24	30		20	4					UA
CS08	AMP	0.3	0.6			24	30		20	5					UA
BCS09	AMP	0.5	1.0			24	30		20	6					UA
BH603	AMP	0.1	0.2					*20	30	7					UA
BH604	AMP	0.1	0.2					*27	30	10					UA
BH605	AMP	0.2	0.3					*24	30	6					UA
BH606	AMP	0.2	0.4					*20	30	7					UA
C-SERIES	PIN	4.5	7.2						17	4	30	60			MM
C SERIES	TPA	1.2	2.7		400	28		*-10	25	6	20	71	21		IM
CA4L1	GUN	1.0	1.5			100	5A	25W					1		CA
CA4L2-C	GUN	1.0	1.5			200	10A	100W					1		CA
CA4S1-B	GUN	3.0	3.6			90	2A	5W					1		CA
CA4S2	GUN	3.0	3.6			100	20A	5W					1		CA
CA4S1-P	GUN	3.0	3.6			60	3A	5W					1		CA
CH-1	MIA	1.0	2.0			12	20			6	55	85			MA
CH-2	MIA	2.0	4.0			12	20			8	55	85			MA
CH-4	MIA	4.0	8.0			12	20			8	55	85			MA
CL6300	GUN	8.9	9.9		200	+10		3			40	85			MU
CL6310	GUN	8.9	9.9		200	+10		3			40	85			MU
CL6360	GUN	8.0	9.0	MC		7		5							MU
CL6370	GUN	9.0	10.0	MC		10		5							MU
CL6386	GUN	10.0	11.0	MC		10		5							MU
CL6390	GUN	11.0	12.0	MC		10		5							MU
CL6401	GUN	8.0	10.0	MC	50	10		5							MU
CL6404	GUN	8.0	11.0	MC		10		10							MU
CL6420	GUN	9.2	9.5	MC	50	10		3							MU
CL6430	GUN	9.2	9.5	MC	50	10		5							MU
CL6440	GUN	9.2	9.5	MC	50	10		3							MU
CL6450	GUN	9.2	9.5	MC	50	10		5							MU
CL6460	GUN	9.2	9.5	MC	50	10		10							MU
CL6470	GUN	9.2	9.5	MC	50	10		10							MU
CM1XM96	GUN	8.5	9.6			28	750	10			30	71	20	25.0	CM
CM1XM107	GUN	10.0	10.7			28	750	10			30	71	20	25.0	CM
CXT11A	GUN	8.0	12.0			6		5		80	55	85			MU
CXT11B	GUN	8.0	12.0			6		10		80	55	85			MU
CXT11C	GUN	8.0	12.0			6		10		80	55	85			MU
D5784	AUU	8.2	12.4			60	20	10					1		SY
D2126Z-1	GUN	8.0				28		1W							SP
D2126Z-2	GUN	8.2				28		1W							SP
D2126Z-3	GUN	8.5				28		1W							SP
D2126-8	GUN	4.2	4.5			28	525	300					15	18.0	SP
D2126U	GUN	5.4	5.9	VT		24		40			0	55	72	84.0	SP
D2126U1	GUN	5.0	6.0	VT		24		5			0	5			SP

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
D21D51-190	TUN	0.2	0.2	MC		24	20	100							SP
D21D51-250	TUN	0.2	0.3	MC		24	20	100							SP
D21D51-260	TUN	0.3	0.3	MC		24	20	100							SP
D21D51-340	TUN	0.3	0.4	MC		24	20	100							SP
D21D51-410	TUN	0.4	0.5	MC		24	20	100							SP
D21D52-240	TUN	0.2	0.3	VT		28	250	40							SP
D21D52-300	TUN	0.3	0.4	VT		28	250	40							SP
D21D52-360	TUN	0.4	0.4	VT		28	250	40							SP
D21D52-430	TUN	0.4	0.6	VT		28	250	40							SP
D21D52-550	TUN	0.6	0.7	VT		28	250	40							SP
D21D52-670	TUN	0.7	0.8	VT		28	250	40							SP
D21D52-820	TUN	0.8	1.0	VT		28	250	40							SP
D21L2-1	OSC	1.0				28		7W			20	50			SP
D21D2-2	OSC	1.0				28		7W			20	50			SP
D21L2-3	OSC	1.0				28		7W			20	50			SP
D21L50	OSC	1.2	1.4	VT		28		600			0	55	72	52.0	SP
D21S2-1	OSC	2.0				28		3W							SP
D21S2-2	OSC	2.0				28		3W							SP
D21S2-3	OSC	2.1				28		3W							SP
D21D50	OSC	2.2	2.4	VT		28		200			0	55	72	55.0	SP
D21D50	OSC	15.9	17.0	VT		28		20			0	55	72	68.0	SP
D5784A	AOC	0.2	12.4			60	20	25					/1		SY
DMP78 SERIES-RF	PRE	0.1	1.0					*10	20	10					RH
D5784B	AOC	0.2	12.4			60	20	50					/1		SY
DA-1414A	GUN	0.2	12.4			12	500	25			55	150	/1		MO
DA-1717B	GUN	0.2	12.4			12	500	50			55	150	/1		MO
DA-2020C	GUN	0.2	12.4			12	500	100			55	150	/1		MO
EGM1530	AMP	0.2	0.3			+20		1	25	2			6		EM
EGM2040	AMP	0.2	0.4			+20		1	25	3			6		EM
EGM2550	AMP	0.2	0.5			+20		1	25	3			6		EM
EGR5001	AMP	0.5	1.0			+20		*-5	25	6			/8		EM
EGR5001LN	AMP	0.5	1.0			+20		*-5	25	4			/8		EM
ESM1530	AMP	0.2	0.4			+20		100	25	6			7		EM
ESM2040	AMP	0.2	0.4			+20		100	25	6			7		EM
ESM2550	AMP	0.2	0.5			+20		100	25	7			7		EM
ESN2040	AMP	0.2	0.5			+20		500	25	8			/8		EM
ESN2550	AMP	0.2	0.5			+20		500	25	8			/8		EM
ESL1530	AMP	0.2	0.3			+20		5	25	4			7		EM
ESL2040	AMP	0.2	0.4			+20		5	25	4			7		EM
ESL2550	AMP	0.2	0.5			+20		5	25	4			7		EM
ESM5001	AMP	0.5	1.0			+20		10	25	8			/8		EM
ESN5001	AMP	0.5	1.0			+20		1	25	6			/8		EM
ESN5001A	AMP	0.5	1.0			15	35	5	24	/5					EM
ESN5001LN	AMP	0.5	1.0			+20		1	25	5			/8		EM
ESN5001LNA	AMP	0.5	1.0			15	35	5	24	/4					EM

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
ETS3102-2	GSC	0.9	1.1	VT	200	28		1W							MP
ETS3152	GSC	1.0	2.0	VT	1K	28		15							MP
ETS3152-2	GSC	1.2	1.6	VT	600	28		50							MP
ETS3152-3	GSC	1.0	2.0	VT				15							MP
ETS3371-2	GSC	0.2	0.5	VT		28		150							MP
ETS3751-2	GSC	0.5	1.0	VT		28		150					1		MP
FLS3077-1	PRE	0.7	0.9		2	22	12	100W						6.2	AL
FLS3078-1	PRE	3.0	6.0		2	22	12	150W						3.0	AL
FLS3079-1	PRE	7.2	9.8		2	22	12	200W						3.0	AL
FM-100	MOL	3.5	14.0			+28	650	25						24.0	AP
FM-100-1	MOL	*2.0				+28		300						24.0	AP
FM-100-2	MOL	*2.0				+28		72W						24.0	AP
FS-1R	GSC	4.0	5.5	MC		20	125	7			0	60	2		FR
FS-2	GSC	0.6	1.2	VT		60	300	1000			10	70	74		FR
FS-2H	GSC	0.6	1.2	VT		60	300	2000			10	70	74		FR
FS-2M	GSC	0.2	0.6	VT		60	300	1000			10	70	74		FR
FS-2-PL	GSA	0.6	1.4			50	400	1000			0	60	735	20.0	FR
FS-2R	GSC	0.6	1.4	MC		40	300	1000			55	71	74		FR
FS-3R	GSC	2.0	4.0	MC		20	125	60			0	60	3		FR
FS-4R	GSC	2.0	4.0	MC		20	125	15			0	60	3		FR
FS-5	GSC	0.5	1.8	MC		20	125	25			0	60	2		FR
FS-6	GSC	0.3	1.6	VT		100	30	20			55	90	73		FR
FS-6H	GSC	0.3	1.8			100	30	100			55	90	73		FR
FS-8	GSC	0.5	1.8	MC		20	125	100			0	60	2		FR
FS-9R	GSC	2.0	8.0	MC		20	125	20			0	60	2		FR
FS-14A	GSC	2.3	2.9		325	60	300	250			10	70	12		FR
FS-14B	GSC	2.8	3.3	VT	400	60	300	200			10	70	12		FR
FS-14C	GSC	3.1	3.6	VT	450	60	300	200			10	70	12		FR
FS-14D	GSC	3.5	4.3	VT	500	60	300	200			10	70	5		FR
FS-14E	GSC	4.2	4.9	VT	500	60	300	175			10	70	5		FR
FS-14F	GSC	4.9	5.6	VT	600	60	300	125			10	70	5		FR
FS-14G	GSC	5.4	6.0	VT	600	60	300	100			10	70	5		FR
FS-14L	GSC	3.5	6.0	MC		40	300	400			55	71	5		FR
FS-14L-PL	GSA	3.5	6.0			50	400	200			0	60	735	20.0	FR
FS-14R	GSC	2.4	3.5	MC		40	300	500			55	71	8		FR
FS-14R-PL	GSA	2.4	3.5			50	400	500			0	60	735	20.0	FR
FS-17R	GSC	7.0	10.0	MC		20	125	10			0	60	3		FR
FS-18	GSC	4.8	11.0		500	100	30	25			55	90	3		FR
FS-18W	GSC	0.5	11.0		1K	100	30	1			55	90	3		FR
FS-19	GSC	0.8	1.2	MC		20	125	10			0	60	1		FR
FS-19A	GSC	1.2	1.8	MC		20	125	10			0	60	1		FR
FS-21B	GSC	0.3	0.5			15	800	10			55	85	5		FR
FS-21CHP	GSC	0.5	2.0			28		1000			55	85	713		FR
FS-21CLP	GSC	0.5	1.5			15		20			55	85	713		FR
FS-21CMP	GSC	0.5	2.0			28		175			55	85	713		FR

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
FS-23	GSC	2.5	5.0			100	30	15			55	90	/5		FR
FS-24	GSC	8.0	10.0	VT	500	60	300	40			10	70	/7		FR
FS-24M	GSC	10.0	10.4	VT	400	60	300	25			10	70	/7		FR
FS-24-PL	GSX	7.0	10.5			50	400	100			0	60	/35	20.0	FR
FS-24R	GSC	7.0	10.0	MC		40	300	40			55	71	/7		FR
FS-25	GSC	1.8	2.5	VT	200	100	30	10			55	90	/3		FR
FS-26	GSC	1.2	1.5			24	80	10			30	71	/4		FR
FS-27R	GSC	5.2	6.0			24	80	20			30	71	/4		FR
FS-28	GSC	1.5	2.3			24	80	10			30	71	3		FR
FS-29A	GSC	2.5	5.0			+28		25			30	71	/51		FR
FS-29B	GSC	8.0	10.0			+28		5			55	85	/51		FR
FS-30	GSC	2.5	5.0			+15		10			55	85	/12		FR
FS-30A	GSC	2.0	2.5			+15		15			55	85	/12		FR
FS-30HP	GSC	2.5	5.0			+28		60			55	85	/12		FR
FS-31	GSC	2.0	3.0			24	80	10			30	71	3		FR
FS-31A	GSC	3.0	4.0			24	80	10			30	71	3		FR
FS-31B	GSC	2.3	3.2			24	80	10			30	71	3		FR
FS-34	GSC	8.0	10.0			+28		5			55	85	/12		FR
FS-34HP	GSC	8.0	10.0			+28		15			55	85	/12		FR
FS-35	GSC	12.4	15.0	VT	800	60	300	25			10	70	7		FR
FS-35-PL	GSX	12.4	18.0			50	400	40			0	60	/35	20.0	FR
FS-35R	GSC	12.4	18.0	MC		40	300	40			55	71	/15		FR
FS-36	GSC	0.2	1.5			100	30	10			55	90			FR
FS-36H	GSC	0.2	1.2			100	30	150			55	90	/3		FR
FS-37A	GSC	4.0	4.5			24	80	10			30	71	4		FR
FS-37A	GSC	4.5	4.9			24	80	10			30	71	4		FR
FS-37A	GSC	4.9	5.4			24	80	10			30	71	4		FR
FS-37A	GSC	5.4	5.9			24	80	10			30	71	4		FR
FS-37B	GSC	5.9	6.5			24	80	10			30	71	4		FR
FS-37B	GSC	6.4	6.9			24	80	10			30	71	4		FR
FS-37C	GSC	6.8	7.3			24	80	10			30	71	4		FR
FS-37C	GSC	7.0	7.5			24	80	10			30	71	4		FR
FS-37D	GSC	7.5	8.0			24	80	5			30	71	4		FR
FS-37D	GSC	8.0	8.6			24	80	5			30	71	4		FR
FS-37D	GSC	8.8	9.2			24	80	5			30	71	4		FR
FS-37E	GSC	9.2	9.8			24	80	5			30	71	4		FR
FS-37E	GSC	9.8	10.4			24	80	5			30	71	4		FR
FS-39	GSC	0.5	2.0			28		70			55	85	45		FR
FS-40	ASC	5.0	12.4			90	40	10			40	70	2		FR
FS-40R	GSC	12.4	18.0			90	40	10			40	70	1		FR
FS-40W	ASC	8.2	12.4			90	40	10			40	70	42		FR
FS-42	GSC	5.0	12.4			90	40	10			40	70	2		FR
FS-43	GSC	8.2	12.4			90	40	10			40	70	/2		FR
FS-47	GSC	2.0	4.0			100	30	15			55	90	/3		FR
FS-48	GSC	15.0	18.0		1M	100	30	5			55	70	/15		FR

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-°C	(+°C	in^3	oz.	
FS-143	MUL	4.6	5.2			30		5					5		FR
FS-49	OSC	12.4	18.0			+28		5			55	85	/24		FR
FS-50	OSC	1.2	2.8			100	30	40			55	90	/3		FR
FM-100	PRE	3.5	14.0			+28	650	25						24.0	AP
FS-146	OSC	0.2	0.5	MC		40	300	2000			55	71	/4		FR
FS-155	MUL	*1.3				200		/1					/14		FR
FS-156	MUL	*1.2				/3W		300					/14		FR
FS-165	OSC	1.6	1.8	MC		)12	300	250			55	71	/1	.	FR
FS-174	MUL	3.9	4.1			1W		30					18		FR
FS-176	MUL	1.2	1.4			20		200					21		FR
FS-195	MUL	*1.3				1W		100					7		FR
FS-201	MUL	*10.5				30		2					3		FR
FS-202	OSC	8.2	12.4			90	40	100			40	70	/2		FR
FS-206	MUL	7.3	8.2			150		3					3		FR
FS-209	MUL	*5.0				100		10					5		FR
G SERIES	TPA	1.2	2.8		450	28		*-4	40	5	20	71	21		IM
H SERIES	TPA	1.2	2.8		450	28		*6	40	5	20	71	21		IM
HFW-3(ATX)S-2030	AMP	0.2	0.3						30	/4					AR
HFW-4(XPT)-50100	AMP	0.5	1.0						16	11					AR
HP35002A	AMP	0.1	0.4			28	45	*7	20	5					HP
HP35003A	AMP	0.1	0.4			40	200	*23	20	10					HP
HP35004A	AMP	0.1	1.3			20	200	*16	25	10					HP
HP35005A	AMP	0.1	2.0			20	300	*16	40	12					HP
KA-1	PAR	*35.0			650				9	8					SK
L-SERIES	PAR	1.3	1.7		20				17	1	30	60	432		MM
L-6	PAR	*1.7			50				17	2					SK
L-7	PAR	*2.3			400				12	2					SK
L-8	PAR	*2.3			150				15	2					SK
L-9	PAR	*2.1			10				20	/3					SK
LA-21028	AMP	*1.1						10	30	4					MP
LA-22518 + C	AMP	*0.2						10	30	2					MP
LA-24518 + C	AMP	*0.4						10	30	2					MP
LA-25018	AMP	*0.5						10	30	/3					MP
LA-29918	AMP	*1.0						10	30	4					MP
LO-100	OSC	7.5	14.0			28	500	10			0	60			AP
M-2	MUL	0.6	0.9					100							SK
M-3	MUL	0.6	0.9					100							SK
M-4	MUL	0.6	0.9					80							SK
M-7	MUL	0.6	0.9					20							SK
M-9	MUL	2.5	2.8					20							SK
MA-82001	OSC	5.4	5.9	MC	100	28	100	30			40	71			MA
MA-82002	OSC	5.4	5.9	MC	300	28	100	10			40	71			MA
MA-82003	OSC	5.4	5.9	MC	500	28	100	5			40	71			MA
MA-82004	OSC	5.9	7.1	MC	100	28	100	20			40	71			MA
MA-82005	OSC	5.9	7.1	MC	300	28	100	10			40	71			MA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
MA-82C07	OSC	4.4	5.0	MC		28	250	250							MA
MA-82C08	OSC	5.9	6.4	MC		28	20	20							MA
MA-82C09	OSC	5.9	6.4	MC		28	500	500							MA
MA-82K01	OSC	15.0	17.0	MC	200	28	100	3			40	71			MA
MA-82L03	OSC	0.9	1.3	MC	100	28	60	50			40	71			MA
MA-82L04	OSC	0.9	1.3	MC	200	28	40	10			40	71			MA
MA-82X02	OSC	7.1	11.0	MC	200	28	100	10			40	71			MA
MA-82X04	OSC	10.5	11.0	MC		28	20	20							MA
MA-4980	AUO	8.2	12.4			100	30	10		20			/1		MA
MA-4986	AUO	8.2	12.4			100	40	50		20			/1		MA
MA-4987	AUO	8.2	12.4			100	50	100		20			/1		MA
MA-4988	AUO	12.4	18.0			70	50	10		20			/1		MA
MA-4989	AUO	12.4	18.0			70	100	50		20			/1		MA
MA-4992	AUO	18.0	26.0			30	150	10		20			/1		MA
MA-8000-FC	AUO	9.0	12.4					10							IM
MA-8001-FC	AUO	9.0	12.4					10							IM
MC82L02	OSC	0.9	1.3	MC	100	28	80	100			40	71			MA
MIC3068-1	TUS	2.0	2.3			10	15	10			55	75	1	1.6	AL
MMP1 SERIES	PRE	1.0	2.0			+12			25	7			/2	2.5	RH
MMP2 SERIES	PRE	2.0	4.0			+12			25	/8			/2	2.5	RH
MMP4 SERIES	PRE	4.0	8.0			+12			25	/9			/2	2.5	RH
MMP/5-C SERIES	MIA	4.0	8.0			12			25	/9			/5	6.0	RH
MMP/5-L SERIES	MIA	1.0	2.0			12			25	7			/5	6.0	RH
MMP/5-S SERIES	MIA	2.0	4.0			12				/8			15	6.0	RH
MMP/6-C SERIES	MIA	4.0	8.0			12			25	/9			/2	2.5	RH
MMP/6-S SERIES	MIA	2.0	4.0			12			25	/8			12	2.5	RH
MMP/6-L SERIES	MIA	1.0	2.0			12			25	7			/2	2.5	RH
MO(L)100X	OSC	0.7	1.0	VT		20	350	80			30	60	25		FS
MO(L)-102	OSC	1.0	1.1	MC		-20	120	250			30	60	7	8.0	FS
MO(L)-102X	OSC	1.0	1.1	MC		20	300	250			30	60	26	15.0	FS
MO(L)-104	OSC	1.1	1.2	MC		20	120	250			30	60	7	8.0	FS
MO(L)-104X	OSC	1.1	1.2	MC		20	300	250			30	60	26	15.0	FS
MO(L)-106	OSC	1.2	1.3	MC		20	120	250			30	60	7	8.0	FS
MO(L)-106X	OSC	1.2	1.3	MC		20	300	250			30	60	26	15.0	FS
MO(L)-108	OSC	1.3	1.5	MC		20	120	200			30	60	7	8.0	FS
MO(L)-108X	OSC	1.3	1.5	MC		20	300	200			30	60	26	15.0	FS
MO(L)-110	OSC	1.5	1.7	MC		20	120	150			30	60	7	8.0	FS
MO(L)-110X	OSC	1.5	1.7	MC		20	300	150			30	60	26	15.0	FS
MO(L)-112	OSC	1.7	2.0	MC		20	120	75			30	60	7	8.0	FS
MO(L)-112X	OSC	1.7	2.0	MC		20	300	75			30	60	26	15.0	FS
MO(S)-114	OSC	2.0	2.3	MC		20	120	75			30	60	5	8.0	FS
MO(S)-114X	OSC	2.0	2.3			20	300	75			30	60	26	15.0	FS
MO(S)-116	OSC	2.3	2.7	MC		20	120	20			30	60	3	2.5	FS
MO(S)-116X	OSC	2.3	2.7			20	300	20			30	60	26	15.0	FS

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-)°C	Operating Temp. Ambient (+)°C	Volume in^3	Weight oz.	Manufacturer
MO(S)-118	OSC	2.7	3.2	MC		20	120	20			30	60	3	2.5	FS
MO(S)-118A	OSC	2.7	3.2			20	300	20			30	60	26	15.0	FS
MO(S)-120	OSC	3.2	3.7	MC		20	120	10			30	60	3	2.5	FS
MO(S)-120A	OSC	3.2	3.7			20	300	10			30	60	26	15.0	FS
MP1-2/2SERIES-L	PRE	1.0	2.0			+12			25	/8					RH
MP2-4/2SERIES-S	PRE	2.0	4.0			+12			25	/8					RH
MP4-8/2SERIES-C	PRE	4.0	8.0			+12			25	8					RH
MP5-1/2SERIESUHF	PRE	0.5	1.0			+12			25	/9					RH
MP7/2 SERIES-X	PRE	7.5	8.5			+12			25	7					RH
MP8/2 SERIES-X	PRE	8.5	9.6			+12			25	7					RH
MP-X SERIES	MIA	7.5	8.5			12			25	7					UA
MP-X SERIES	MIA	8.5	9.6			12			25	7					UA
MP-X SERIES	MIA	9.5	10.2			12			25	8					UA
MPC-1	PRE	4.0	8.0			+12	15		15	12					AP
MPO8/2 SERIES-X	PRE	8.5	9.6			+12			25	8					RH
MPO8/7SERIES-X	PRE	8.5	9.6			+12	40		20	9					RH
MP9/2 SERIES-X	PRE	9.5	10.2			+12			25	8					RH
MPO9/2 SERIES-X	PRE	9.5	10.2			+12			25	/9					RH
MPO10/2 SERIES-K	PRE	8.3	12.0			+12			25	10					RH
MPO10/7SERIES-K	PRE	8.0	12.0			+12	40		20	11					RH
MPO-K SERIES	MIA	8.0	12.0			12			25	/10					UA
MPO-X SERIES	MIA	8.5	9.6			12			25	8					UA
MPO-X SERIES	MIA	9.5	10.2			12			25	/9					UA
MPS-1	PRE	2.0	4.0			+12	15		15	11					AP
MS55	OSC	2.7	3.2	MC	28	25	100	20			55	100	3		FS
MS80	OSC	4.4	4.9	MC	46	25	125	10			55	100	6	/9.0	FS
MS82L01	OSC	0.9	1.3	MC	100	28	100	250			40	71			MA
MS82L05	OSC	1.5	1.8	MC	100	28	100	100			40	71			MA
MS-82L06	OSC	1.3	1.8	MC	150	28	80	50			40	71			MA
MS-82L07	OSC	1.5	1.8	MC	200	28	60	10			40	71			MA
MS-82S01	OSC	1.8	3.2	MC	100	28	100	50			40	71			MA
MS-82S02	OSC	1.8	3.2	MC	200	28	80	20			40	71			MA
MS-82S03	OSC	1.8	3.2	MC	200	28	60	5			28	71			MA
MS-82S04	OSC	2.0	2.1	MC		28	1W	1000							MA
MS-82X01	OSC	7.1	11.0	MC	100	28	100	20			40	71			MA
MS-82X03	OSC	7.1	11.0	MC	300	28	100	5			40	71			MA
MS100	OSC	5.4	5.9	MC	56	25	125	10			55	100	8	/9.0	FS
MS105A	OSC	5.4	5.9	MC	500	25	100	3			55	100	2	/5.0	FS
MS105B	OSC	5.4	5.9	MC	500	25	100	3			55	100	2	/5.0	FS
MS110	OSC	5.9	6.4	MC	62	25	125	5			55	100	8	/9.0	FS
MS-1222A	OSC	2.7	3.2	MC		20	50	20			55	85	3	2.5	FS
MS(C)-46	OSC	4.1	4.4	MC		20		10			30	60	6	17.0	FS
MS(C)-46X	OSC	4.1	4.4	MC		20		10			30	60	30	30.0	FS
MS(C)-48	OSC	4.3	4.9	MC		20		10			30	60	6	17.0	FS
MS(C)-48X	OSC	4.3	4.9	MC		20		10			30	60	30	30.0	FS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
MS(C)-52	OSC	5.4	5.9	MC		20		10			30	60	6	17.0	FS
MS(C)-52X	OSC	5.4	5.9	MC		20		10			30	60	30	30.0	FS
MS(C)-54	OSC	5.8	6.4	MC		20		10			30	60	6	17.0	FS
MS(C)-54X	OSC	5.8	6.4	MC		20		10			30	60	30	30.0	FS
MS(C)-56	OSC	6.4	6.9	MC		20		10			30	60	6	17.0	FS
MS(C)-56X	OSC	5.8	6.4	MC		20		10			30	60	30	30.0	FS
MS(C)-58	OSC	6.8	7.2	MC		20		10			30	60	6	17.0	FS
MS(C)-58X	OSC	6.8	7.2	MC		20		10			30	60	30	30.0	FS
MS(C)-60	OSC	7.0	7.5	MC		20		5			30	60	6	17.0	FS
MS(C)-60X	OSC	7.0	7.5	MC		20		5			30	60	30	30.0	FS
MS(C)-62	OSC	7.5	8.0	MC		20		5			30	60	6	17.0	FS
MS(C)-62X	OSC	7.5	8.0	MC		20		5			30	60	30	30.0	FS
MS(C)A-480X	OSC	4.3	4.9	MC		20	400	50			30	60	30	30.0	FS
MS(C)B-480X	OSC	4.3	4.6	MC		20	400	50			30	60	30	30.0	FS
MS(C)540X	OSC	4.6	4.9	MC		20	400	50			30	60	30	30.0	FS
MS(C)560X	OSC	6.3	6.8	MC		20	400	50			30	60	30	30.0	FS
MS(K)80	OSC	12.1	12.7			20	300	10			30	60	10	21.0	FS
MS(K)80X	OSC	12.1	12.7			20	300	10			30	60	34	34.0	FS
MS(K)82	OSC	12.6	13.2			20	300	5			30	60	10	21.0	FS
MS(K)82X	OSC	12.6	13.2			20	300	5			30	60	34	34.0	FS
MS(K)84	OSC	13.1	13.7			20	300	5			30	60	/10	21.0	FS
MS(K)84X	OSC	13.1	13.7			20	300	5			30	60	34	34.0	FS
MS(K)86	OSC	13.6	14.2			20	300	5			30	60	10	21.0	FS
MS(K)86X	OSC	13.6	14.2	VT		20	400	5			30	60	51	34.0	FS
MS(S)-42	OSC	3.6	3.9	MC		20	300	10			30	60	/6	17.0	FS
MS(S)-42X	OSG	3.6	3.9	MC		20	400	10			30	60	30	30.0	FS
MS(S)-44	OSC	3.8	4.2	MC		20	400	10			30	60	/6	17.0	FS
MS(S)-44X	OSC	3.8	4.2	MC		20	400	10			30	60	30	30.0	FS
MS(S)-420A	OSC	3.6	3.9	MC		20	400	50			30	60	30	30.0	FS
MS(S)-440X	OSC	3.8	4.2	MC		20	400	50			30	60	30	30.0	FS
MS(S)-460X	OSC	4.1	4.4	MC		20	400	50			30	60	30	30.0	FS
MS(X)-64	OSC	8.0	8.5	MC		20	300	5			30	60	/6	17.0	FS
MS(X)-64X	OSC	8.0	8.5	MC		20	400	5			30	60	30	30.0	FS
MS(X)74	OSC	10.6	11.2			20	300	10			30	60	10	21.0	FS
MS(X)74X	OSC	10.6	11.2			20	300	10			30	60	34	34.0	FS
MS(X)-76	OSC	11.2	11.8			20	300	10			30	60	10	21.0	FS
MS(X)76X	OSC	11.2	11.8			20	300	10			30	60	34	34.0	FS
MS(X)78	OSC	11.6	12.2			20	300	10			30	60	10	21.0	FS
MS(X)78X	OSC	11.6	12.2			20	300	10			30	60	34	34.0	FS
MVL-2000	OSC	1.0	2.0	VT		20	80	100			30	60	2	4.0	FS
MVL2011	OSC	1.0	2.0	VT		20	80	50			30	60	1	4.0	FS
MVP-1000	OSC	0.5	1.0	VT		20	140	50			30	60	4	6.0	FS
MVP-1001	OSC	0.5	1.0	VT		20	140	200			30	60	4	6.0	FS
MVS4001	OSC	2.0	4.0			20	150	20			30	60	2	3.0	FS
NC-13001	TDA	12.9	13.9			24			45	6			48		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
NTAC-425B	TDA	0.4	0.4			115			17	3			168		MS
NTAC-425B(2)	TDA	0.4	0.4			115			30	3			950		MS
NTAC-750B	TDA	0.7	0.8			+15			17	4			560		MS
NTAC-900B	TDA	0.9	0.9			115			18	4			588		MS
NTAC-944B(2)	TDA	0.9	0.9			28			30	4			10H		MS
NTAC-956	TDA	0.9	0.9			12			17	4			343		MS
NTAC-1030B	TDA	9.8	10.8			18			15	5			24		MS
NTAC-1040B	TDA	1.0	1.1			15			17	4			88		MS
NTAC-1090B	TDA	1.1	1.1			12			15	4			101		MS
NTAC-1150	TDA	1.1	1.2			12			17	4			70		MS
NTAC-1250B	TDA	1.0	1.5			28			13	6			231		MS
NTAC-1300	TDA	1.2	1.4			18			15	4			144		MS
NTAC-1350B	TDA	1.2	1.4			115			17	4			70		MS
NTAC-1420	TDA	1.4	1.4			15			17	4			70		MS
NTAC-1450B	TDA	1.4	1.5			28			15	4			70		MS
NTAC-1485B	TDA	1.4	1.6			28			20	4			144		MS
NTAC-1610	TDA	1.6	1.6			28			17	4			70		MS
NTAC-1675	TDA	1.6	1.7			15			17	4			512		MS
NTAC-1730	TDA	1.7	1.8			15			17	4			70		MS
NTAC-1750	TDA	1.7	1.8			230			18	4			512		MS
NTAC-1815	TDA	1.8	1.8			115			19	4			70		MS
NTAC-1880	TDA	1.9	1.9			20			15	4			416		MS
NTAC-1940	TDA	1.9	2.0			115			19	4			384		MS
NTAC-2100B	TDA	2.0	2.2			115			17	4			130		MS
NTAC-2113B	TDA	2.1	2.1			15			20	4			105		MS
NTAC-2215B	TDA	2.2	2.2			115			17	4			70		MS
NTAC-2250-B	TDA	2.2	2.3			18			20	4	0	50	88		MS
NTAC-2250B(2)	TDA	2.2	2.3			15			30	4			120		MS
NTAC-2335B	TDA	2.3	2.4			12			15	4			70		MS
NTAC-2800B	TDA	2.7	2.9			115			17	4			125		MS
NTAC-3000B(2)	TDA	2.9	3.1			22			25	4			180		MS
NTAC-3300(2)	TDA	3.1	3.5			220			25	4			108		MS
NTAC-3675B	TDA	3.6	3.8			115			17	4			101		MS
NTAC-3750B	TDA	3.5	4.0			115			13	4			70		MS
NTAC-3950B	TDA	3.7	4.2			12			12	5			420		MS
NTAC-4700B	TDA	4.4	5.0			28			17	4			30		MS
NTAC-5000B	TDA	4.8	5.2			230			17	4			80		MS
NTAC-5500B	TDA	5.0	6.0			28			15	5			48		MS
NTAC-5650B	TDA	5.4	5.9			115			17	4			60		MS
NTAC-6175B	TDA	5.9	6.4			115			17	4			17		MS
NTAC-6390B	TDA	6.2	6.6			12			17	4			17		MS
NTAC-7275B	TDA	7.1	7.4			12			17	5			18		MS
NTAC-8750B	TDA	8.5	9.0			15			15	5			18		MS
NTAC-8900	TDA	8.8	8.9			12			15	4			6		MS
NTAC-9080	TDA	9.0	9.2			115			17	5			90		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
NTAC-9150	TDA	8.5	9.6						15	5			12		MS
NTAC-9240	TDA	9.2	9.3			115			17	5			36		MS
NTAC-9375	TDA	9.3	9.5			115			15	5			36		MS
NTAC-9400B(3)	TDA	9.3	9.5			115			45	5			128		MS
NTAC-9570B	TDA	9.4	9.7			115			17	5			48		MS
NTAC-1035B	TDA	1.2	1.4						17	4			70		MS
NTAC-15,500	TDA	15.0	16.3			15			50	6			540		MS
NTAC-16,000B	TDA	15.9	16.3			18			15	6			60		MS
NTAC-17,000B	TDA	16.6	17.2			22			15	7			12		MS
NTAC-19,000B	TDA	18.9	19.1			22			15	7			6		MS
O-2	OSC	2.1	2.2	ME	28	100		100			20	55			SK
O-3	OSC	2.8	3.1	ME	28	100		100			20	55			SK
O-4	OSC	4.0	4.4	ME	28	100		80			20	55			SK
O-7	OSC	6.7	9.3	ME	28	100		20			20	55			SK
O-9	OSC	7.8	8.2	ME	28	100		20			20	55			SK
O025WV	OSC	*9.2			300	5W		15					/2	3.5	IS
O075WV	OSC	*9.7			300	5W		15					/2	3.5	IS
OK00WM	OSC	*10.0			500	5W		15			30	70	/2	3.5	IS
OK25WV	OSC	*10.2			300	5W		15					/2	3.5	IS
OK75WV	OSC	*10.7			300	5W		15					/2	3.5	IS
OL-102	TOS	1.3	2.3			15	50	5			20	80	/6	8.0	PE
OL-105	TOS	1.0	2.0			15	50	5			20	60	/6	8.0	PE
OL00WM	OSC	*11.0			500	5W		15			30	70	/2	3.5	IS
OM00WM	OSC	*12.0			500	5W		15			30	70	/2	3.5	IS
OP-100	TOS	0.5	1.0			15	50	5			20	60	/6	8.0	PE
OS-100	TOS	2.0	4.0			15	50	2			20	60	/5	8.0	PE
OS1100	OSC	0.6	1.2	MC		28	250	500					2		AD
OTA1-250A	TDA	0.2	0.5						18	4					MS
OTA1-250B	TDA	0.2	0.5						15	4					MS
OTA1-500A	TDA	0.5	1.0						15	6					MS
OTA1-500B	TDA	0.5	1.0						15	5					MS
OTA1-1000A	TDA	1.0	2.0						15	4					MS
OTC-1000A	TDA	1.0	2.0						15	5					MS
OTC-1000B	TDA	1.0	2.0						15	4					MS
OTC-2000A	TDA	2.0	4.0						15	6					MS
OTC-2000B	TDA	2.0	4.0						15	4					MS
OTC-4000A	TDA	4.0	8.0						15	6					MS
OTC-4000B	TDA	4.0	8.0						15	5					MS
OTC-8000A	TDA	8.0	12.0						15	6					MS
OTC-8000B	TDA	8.0	12.0						15	6					MS
OTI-9	MIA	8.5	9.6			12	20			8	55	85			MA
OTI-9P	MIA	8.5	9.6			12				8	55	85			MA
OTL-9	MIA	8.5	9.6			12	20			8	55	85			MA
OTL-9P	MIA	8.5	9.6			12	20			8	55	85			MA
OTL-10	MIA	10.0	11.0			12	20			9	55	85			MA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
OTL-10P	MIA	10.0	11.0			12	20			9	55	85			MA
OTL-11	MIA	10.7	11.7			12	20			9	55	85			MA
OTL-11P	MIA	10.7	11.7			12	20			9	55	85			MA
OTL-13	MIA	13.0	14.0			12	20			10	55	85			MA
OTL-13P	MIA	13.0	14.0			12	20			10	55	85			MA
OTL-16	MIA	15.5	17.5			12	20			10	55	85			MA
OTL-16P	MIA	15.5	17.5			12	20			10	55	85			MA
OTA-1-250	GAM	0.2	0.5			-20	50	*2	20	5	40	55		5.0	VA
OTA-1-500	GAM	0.5	1.0			-15	40	*2	20	5	40	55		5.0	VA
GA-100	GUS	8.0	12.4			7	450	10					31	56.0	PE
P701	TDA	4.4	5.0						18	5	0	55	121	56.0	PL
P702	TDA	8.2	9.0			28	10		16	6	0	55	26	16.0	PL
P8001	OSC	1.6	2.2			28	250	200			10	70			PL
P8003	OSC	2.2	2.3			28	65	15			0	50		8.5	PL
P8004	OSC	16.0	17.0			28	250	6			0	50		23.5	PL
P8005	OSC	1.6	2.2			28	10M	1000			0	60			PL
P8006	OSC	12.5	14.0			28	800	300			0	50	84	44.0	PL
P8007	OSC	*15.3				28	2A	1W			0	70	84	44.0	PL
P8500	AGC	8.0	11.0	MC		100	25	60			40	85	/1	1.5	PL
PA41P	OSC	3.6	4.1	MC		20	300	10			30	60	/3	30.0	CM
PA49P	OSC	4.3	4.9	MC		20	300	10			30	60	/3	30.0	CM
PA64P	OSC	5.9	6.5	MC		20	300	10			30	60	/3	30.0	CM
PA69P	OSC	6.4	6.9	MC		20	300	10			30	60	/3	30.0	CM
PA72P	OSC	6.8	7.2	MC		20	300	10			30	60	/3	30.0	CM
PA77P	OSC	7.0	7.8	MC		20	300	10			30	60	/3	30.0	CM
PA84P	OSC	7.8	8.5	MC		20	300	10			30	60	/3	30.0	CM
PA-90AA	AMP	*9.0		MC	15				17	/2	54	71	36		IS
PA112P	OSC	10.6	11.2			20	300	10			30	60	54	30.0	CM
PA117P	OSC	11.2	11.7			20	300	10			30	60	54	30.0	CM
PA132P	OSC	12.6	13.2			20	300	10			30	60	54	30.0	CM
PAR1612A	PAR	2.2	2.3		35	60	20		17	/3			/29	32.0	AL
PAR1618A	PAR	2.7	2.9		20		20		17		0	50	320	H1.6	AL
PC00AA	AMP	*2.0		MC	20				20	2	54	71	36		IS
PM7000	OSC	1.2	1.3	MC	150	22	19M	190			55	125	6	8.0	AI
PM7001	OSC	1.5	1.6	MC	150	22	125	110			55	125	6	8.0	AI
PM7002	OSC	1.3	1.5	MC	10	22	125	150			55	125	6	8.0	AI
PM7004	OSC	1.1	1.2	MC	10	22	125	220			55	125		8.0	AI
PM7005	OSC	1.6	1.8	MC	10	22	125	75			55	125		8.0	AI
PM7100	OSC	0.5	1.0	VI				250			55	71	2	3.0	AI
PM7101	OSC	0.5	1.0	VI		50	200	500			55	71	2	3.0	AI
PM7102	OSC	0.8	1.5			50	175	150				55			AI
PM7103	OSC	0.8	1.5			60	175	100				55			AI
PM7104	OSC	0.3	0.5			50	200	500				55			AI
PM7106	OSC	0.5	1.0			60	225	250				55			AI
PM7120	OSC	1.0	2.0			100	150	150				55			AI

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-)°C	Operating Temp. Ambient (+)°C	Volume in^3	Weight oz.	Manufacturer
PM7121	OSC	1.0	2.0			100	150	150				55			AI
PM7240	OSC	2.0	4.0			100	150	40				55			AI
PM7241	OSC	2.0	4.0			100	150	40				55			AI
PM7242	OSC	2.0	4.0			100	150	20				55			AI
PM7243	OSC	2.0	4.0			100	150	20				55			AI
PM7301	OSC	3.6	4.1	VT	20			10			30	60	36	27.0	AI
PM7302	OSC	4.1	4.4	VT	20			10			30	60	36	27.0	AI
PM7303	OSC	4.3	4.9	VT	20			10			30	60	36	27.0	AI
PM7304	OSC	5.4	5.9	VT	20			10			30	60	36	27.0	AI
PM7305	OSC	5.9	6.5	VT	20			10			30	60	36	27.0	AI
PM7307	OSC	6.4	6.9	VT	20			10			30	60	36	27.0	AI
PM7309	OSC	6.8	7.2	VT	20			10			30	60	36	27.0	AI
PM7311	OSC	7.0	7.5	VT	20			5			30	60	36	27.0	AI
PM7312	OSC	7.5	8.0	VT	20			7			30	60	36	27.0	AI
PM7313	OSC	8.0	8.5	VT	20			5			30	60	36	27.0	AI
W3122	PRE	0.5	1.0					*5		/9			10		AE
W3203	PRE	0.6	1.2					*-5		/11			/8		AE
W3205	PRE	0.5	1.0							/10			10		AE
W4114	PRE	1.0	2.0							/11			/9		AE
W4204	PRE	1.0	2.0					*5		11			/9		AE
W4204H	PRE	1.0	2.0					*20		13			/9		AE
W4205	PRE	1.4	1.5							9			/8		AE
W5114	PRE	2.0	4.0							9			/8		AE
W5115B	PRE	2.5	4.0					*-5		10			8		AE
W5213	PRE	2.0	4.0							12			9		AE
W5214	PRE	2.0	4.0							/12			/9		AE
W5214H	PRE	2.0	4.0					*20		/14			/9		AE
W5215	PRE	2.2	2.3							9			/8		AE
W5314	PRE	3.7	4.2							/10			/8		AE
W6124	PRE	4.0	8.0							10			7		AE
W6207	PRE	4.0	8.0							/13			9		AE
W6301	PRE	4.0	8.0							/13			7		AE
W6301H	PRE	4.0	8.0					*10		13			7		AE
W6302B	PRE	4.0	8.0					*-5		/14			9		AE
W7126	PRE	8.0	12.0							11			7		AE
W7215	PRE	8.0	12.0							13			9		AE
W7301	PRE	8.0	12.0					*5		/14			7		AE
S-5245	PRE	1.0	2.0			20	100			/9	30	85	5	3.8	SE
S-5355	PRE	2.0	4.0			20	100			/9	30	80	/4	3.7	SE
K-SERIES	PAR	1.7	2.4		20				17	/2	30	60	432		MM
K-2000	PAR	2.2	2.3						20	1				42.0	MM
S-SERIES	PAR	2.7	3.9						17	/3	30	60	550		MM
S SERIES	TPA	1.2	2.8		450	28		*6	40	6	55	85	21		IM
S-6	PAR	*3.0			600				12	2					SK
S-7	PAR	*3.0			850				14	2					SK

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
S-9	MIA	8.5	9.6			12	20		8	55	65				MA
S-8	PAR	*2.5			25				20	8					SK
S21S50	OSC	2.2	2.4	VT		28		*200			0	55	72	55.0	SP
S21U50	OSC	15.9	17.2	VT		28		*20			0	55	72	68.0	SP
S127V2	OSC	1.4	2.3	MC	10	30	225	1100			55	71	16	6.0	RC
S128	TDA	*2.8			500				18	6			33	40.0	RC
S132	MOL	9.5	10.5		100			*-60					30	5.0	RC
S138	OSC	4.8	5.2					1250			15	57	36	27.5	RC
S139	OSC	2.4	2.6					2500			15	57	36	27.5	RC
S140	OSC	1.2	1.3					4000			15	57	36	27.5	RC
S141	OSC	0.8	0.9					6000			15	57	36	25.0	RC
S142	OSC	0.4	0.4					8000			15	57	26	22.4	RC
S-144V1	TDA	5.9	6.4		500	24	175		15	4	20	70	33	16.0	RC
S156	TDA	3.9	4.0		50	7	74		13	5	20	70	64	16.0	RC
S157	TDA	4.1	4.2		50	7	74		13	5	20	70	64	16.0	RC
S163	OSC	0.5	1.0	MC	100	28	150	500			55	71	4	3.0	RC
S164	TDA	8.5	9.6	MC	75	24	80	10					13	5.0	RC
S166	TDA	6.9	7.3			78	4		14	5			68	16.0	RC
S170	OSC	1.7		MC	10	20	160	220			0	70		2.5	RC
S170V100	OSC	1.7		MC	10	20	160	220			0	70		2.5	RC
S172	OSC	0.5	1.0	VT	25	28	60	250			55	71		2.0	RC
S173	OSC	0.5	0.8	FX		35	600	2000			55	71	4	5.0	RC
S174	TDA	6.9	7.1			24	25		13	5			95	16.0	RC
S176	OSC	2.1	2.3	FX		28		5000					60	25.0	RC
S177	OSC	5.0	5.5	VT		28		1000					39	28.0	RC
S178	OSC	0.3	0.4	FX		28	4	40W					50	25.0	RC
S179	OSC	1.1	1.3	MC		28		10W					60	16.0	RC
S182	OSC	2.5	2.8	VT		28		2000					39	28.0	RC
S183	OSC	1.2	1.4	VT		28		4000					34	28.0	RC
S184	OSC	0.6	0.7	VT		28		8000					25	20.0	RC
S185	OSC	0.3	0.3	VT		28		8000					11	12.0	RC
S188	TDA	7.4	7.6			7			13	5			26	13.0	RC
S189	TDA	7.6	7.7			7			13	5			26	13.0	RC
S190	OSC	1.2	1.9	MC	10	20	90	200			0	70		3.0	RC
S193	OSC	0.3	0.4			28		25W					24	12.0	RC
S194	TPA	0.3	0.4	FX		28			7						RC
S195	TUM	4.2	5.2	MC	25	18								5.0	RC
S197	TDA	7.5	7.8		300	7	74		13	76			16	16.0	RC
S198	OSC	9.2	9.9	MC	50	24	200	100							RC
S199	TUM	1.2			15	18	100	750							RC
S200	OSC	1.8	2.0	MC	100	20	100	200							RC
S201	TPA	1.9	2.0		20	-24	625						33		RC
S208	OSC	1.9	2.2	VT		27		50			30	60	5	4.5	RC
S227	OSC	1.1		MC	10	28	6	2000			0	75			RC
S230	TPA	1.8	2.0	MC	100	25	350	1250			20	70	33	40.0	RC

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-)°C	Operating Temp. Ambient (+)°C	Volume in^3	Weight oz.	Manufacturer
S232	OSC	*9.3		ME		12	320	8			50	70	74	6.5	RC
S241	OSC	1.0	1.6	VT		20	100				50	90	4		RC
S-1001	OSX	0.1	0.5			28		150W			40	71	24	14.0	AC
S-1002-SERIES	OSX	0.6	1.2			24		1W			30	60	21		AC
S1005 + S1006	PAR	2.7	2.9		7				17	13	30	60	550		MM
SP-120A	PRE	0.2	0.4					*-6	25	3	20	100	5	4.5	AP
SP-130A	PRE	0.3	0.6					*-6	30	4	54	71	5	4.5	AP
SP-141B	PRE	0.5	1.0					1	24	6	54	71	5	4.5	AP
SP-300/200	PRE	0.2	0.2			+12	20		30	4					AP
SP-375/250	PRE	0.3	0.5			+12	20		30	4					AP
SP-450/300	PRE	0.3	0.6			+12	30	*-3	30	5					AP
SP-650/700	PRE	0.3	1.0			+12	36	*-3	25	6					AP
SP-750/500	PRE	0.5	1.0			+12	28	*-3	25	6					AP
SP-1500/1000	PRE	1.0	2.0						25	5	54	85		3.5	AP
SP-2250/1500	PRE	1.5	3.0			+12	50		25	9					AP
SP-3000/2000	PRE	2.0	4.0			+12	50		20	10					AP
SPS-1500/1000	PRE	1.0	2.0				2W		25	9					AP
SPS-3000/2000	PRE	2.0	4.0				2W		20	10					AP
SS-9P	MIA	8.5	9.6			12	20		8	55	85				MA
SS-13	MIA	13.0	14.0			12	20		10	55	85				MA
SS-13P	MIA	13.0	14.0			12	20		10		55	85			MA
SS-16	MIA	15.5	17.5			12	20			10	55	85			MA
SS-16P	MIA	15.5	17.5			12	20			10	55	85			MA
SS-23	MIA	23.0	25.0			12	20			12	55	85			MA
SS-23P	MIA	23.0	25.0			12	20			12	55	85			MA
S-35	MIA	34.0	36.0			12	20			13	55	85			MA
SS-35P	MIA	34.0	36.0			12	20			13	55	85			MA
SS100	TDO	1.0	1.4	MC				3000					18	16.0	RC
SS104	TDO	0.8	1.4	VT	50			4000					7	6.0	RC
SS107	TDO	0.5	2.0	FX	20			2					8	6.0	RC
SS500	TDA	1.3	1.3		50			*-15	20	6			15	8.0	RC
SS1000	PAR	2.2	2.3		100			1	15	7				5.0	RC
SS1000	TPA	0.5	1.0		10			5W				50			MD
SS1004	PAR	0.4	0.4	MC	10			*-15	17	2			88	H1.4	RC
SS1005	PAR	1.2	1.4	MC	10			*-15	17	3			352	H1.4	RC
SS-1006	PAR	2.2	2.3	MC	10			*-15	17	3			288	H1.3	RC
SS-1015	PAR	2.9	3.1	MC	12			*-15	17	3			238	H1.1	RC
SS-1027	PAR	1.2	1.4	MC	10			*-15	15	1			960	H1.4	RC
SS-1028	PAR	2.2	2.3	MC	15			*-15	15	2			480	H1.3	RC
SS-1029	PAR	2.9	3.1	MC	30			*-15	15	2			480	H1.3	RC
SS-1030	PAR	1.6	1.7	MC	15			*-15	15	2			960	H1.4	RC
SS1032	MUL	4.9	5.1		20	28	643	*-85					30	19.0	RC
SS-2100	TDA	5.4	7.1		500				14	5	20	70	26	12.5	RC
SS2106	TDA	9.2	9.7			-/5	3	10	15	17	40	70	3	16.0	RC
SSPO	OSC	0.4	0.9					1500			20	50	15	15.9	GC

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
SSOAH	TOS	12.4	14.0			20	100	5			20	60		8.0	GC
SS14	TOS	9.0	10.0	VI	250			8			20	60	8		GC
SSA1	OSC	9.0	10.0	VI				15			0	50		16.3	GC
SSA8	TOS	8.0	10.5			18	100	8			20	60		8.0	GC
SXM-215	TOS	0.2	0.2	MC		40	160	1000					25		MS
SXM-400	TOS	0.4	0.4	MC		40	160	1000					25		MS
SXM-750	TOS	0.8	0.8	MC		40	160	500					25		MS
SXM-900	TOS	0.9	1.0	MC		40	160	500					25		MS
SXM-1000	TOS	1.0	1.1	MC		40	160	300					25		MS
SXI-215	TOS	0.2	0.2	VI		40	160	1000					25		MS
SXI-400	TOS	0.4	0.4	VI		40	160	750					25		MS
SXI-750	TOS	0.8	0.8	VI		40	160	500					25		MS
SXI-900	TOS	0.9	1.0	VI		40	160	500					25		MS
SXI-1050	TOS	1.0	1.1	VI		40	160	300					25		MS
SYA-3200	ADO	8.2	12.4	MC	100	50		10			30	71	5		SY
SYA-3200A	ADO	8.2	12.4	MC	100	10	25	25			30	71	5		SY
SYA-3200B	ADO	8.2	12.4	MC	100			50			30	71	5		SY
SYA-3201	ADO	8.2	12.4	MC	100	70		10			30	71			SY
SYA-3201A	ADO	8.2	12.4	MC	100	10	25	25			30	71			SY
SYA-3201B	ADO	8.2	12.4	MC	100			50			30	71			SY
1-200-1K	AMP	*0.5			12			1W			40	55	2		AC
15505A	TDA	3.7	4.2						11	15		40	72	53.0	AE
15505B	TDA	3.7	4.2						11	5		40	72	53.0	AE
15505C	TDA	3.7	4.2						11	5		40	72	53.0	AE
15529	TDA	3.7	4.2						11	5		40	116	70.0	AE
15598	TDA	3.7	4.2			-24			11	5		40	58	39.0	AE
15598A	TDA	3.7	4.2			-24			11	15		55	33	49.0	AE
15720	TDA	3.7	4.2			+24			1	7		40	293	48.0	AE
16636	TDA	3.7	4.2						11	16		45	53	49.0	AE
16636A	TDA	3.7	4.2						11	15		45	53	49.0	AE
TP-8-1435	PRE	*1.5			100	15	25		25	16	20	70	17		VA
TP-8-2200	PRE	*2.3			100	15	25		25	16	20	70	17		VA
TQN-1485	TPA	1.4	1.5					40	15	4			3	6.0	MS
TQN-2153	TPA	0.2	0.3			20	30		40	4	0	50	24		MS
TQN-2154	TPA	0.2	0.3			20	30		20	3	0	50	16		MS
TQN-2155	TPA	0.2	0.3			20	30		30	3	0	50	20		MS
TQN-2156	TPA	0.2	0.3			20	30		40	3	0	50	24		MS
TQN-2250	TPA	2.2	2.3			20	30	60	15	6			3	6.0	MS
TQN-3941	TPA	0.4	0.4			20	30		20	4	0	50	16		MS
TQN-3942	TPA	0.4	0.4			20	30		30	4			20		MS
TQN-3943	TPA	0.4	0.4			20	30	40	4		0	50	24		MS
TQN-4041	TPA	0.4	0.4			20	30		20	6	0	50	16		MS
TQN-4042	TPA	0.4	0.4			20	30		30	6	0	50	20		MS
TQN-4043	TPA	0.4	0.4			20	30		40	6	0	50	24		MS
TQN-4044	TPA	0.4	0.4			20	30		20	4	0	50	16		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
TQN-4045	TPA	0.4	0.4			20	30		30	4	0	50	20		MS
TQN-4046	TPA	0.4	0.4			20	30		40	4	0	50	24		MS
TQN-8001	TPA	0.8	0.8			20	30		20	8	0	50	16		MS
TQN-8002	TPA	0.8	0.8			20	30		30	8	0	50	20		MS
TQN-8003	TPA	0.8	0.8			20	30		40	8	0	50	24		MS
TQN-8004	TPA	0.8	0.8			20	30		20	6	0	50	16		MS
TQN-8005	TPA	0.8	0.8			20	30		30	6	0	50	20		MS
TQN-8006	TPA	0.8	0.8			20	30		40	6	0	50	24		MS
TQU-1601	TPA	0.2	0.3			20	30		20	5			16		MS
TQU-1602	TPA	0.2	0.3			20	30		26	5			20		MS
TQU-1603	TPA	0.2	0.3			20	30		32	5			24		MS
TQU-1604	TPA	0.2	0.3			20	30		20	4	0	50	16		MS
TQU-1605	TPA	0.2	0.3			20	30		26	4	0	50	20		MS
TQU-1606	TPA	0.2	0.3			20	30		32	4	0	50	24		MS
TQU-2001	TPA	0.2	0.4			20	30		20	7		16			MS
TQU-2002	TPA	0.2	0.4			20	30		26	7		20			MS
TQU-2003	TPA	0.2	0.4			20	30		32	7			24		MS
TQU-2004	TPA	0.2	0.4			20	30		20	4	0	50	16		MS
TQU-2005	TPA	0.2	0.4			20	30		26	4	0	50	20		MS
TQU-2006	TPA	0.2	0.4			20	30		32	4	0	50	24		MS
TQU-2501	TPA	0.2	0.5			20	30		15	7			16		MS
TQU-2502	TPA	0.2	0.5			20	30		20	7			20		MS
TQU-2503	TPA	0.2	0.5			20	30		25	7			24		MS
TQU-2504	TPA	0.2	0.5			20	30		15	4	0	50	16		MS
TQU-2505	TPA	0.2	0.5			20	30		20	4	0	50	20		MS
TQU-2506	TPA	0.2	0.5			20	30		25	4	0	50	24		MS
TQU-3001	TPA	0.3	0.6			20	30		15	7			16		MS
TQU-3002	TPA	0.3	0.6			20	30		20	7			20		MS
TQU-3003	TPA	0.3	0.6			20	30		25	7			24		MS
TQU-3004	TPA	0.3	0.6			20	30		15	4	0	50	16		MS
TQU-3005	TPA	0.3	0.6			20	30		20	4	0	50	20		MS
TQU-3006	TPA	0.3	0.6			20	30		25	4	0	50	24		MS
TQU-4001	TPA	0.4	0.8			20	30		15	8			16		MS
TQU-4002	TPA	0.4	0.8			20	30		20	8			20		MS
TQU-4003	TPA	0.4	0.8			20	30		25	8	0	50	24		MS
TQU-4004	TPA	0.4	0.8			20	30		15	7	0	50	16		MS
TQU-4005	TPA	0.4	0.8			20	30		20	7	0	50	20		MS
TQU-4006	TPA	0.4	0.8			20	30		25	7	0	50	24		MS
TQU-5001	TPA	0.5	1.0			20	30		15	10	0	50	16		MS
TQU-5002	TPA	0.5	1.0			20	30		20	10	0	50	20		MS
TQU-5003	TPA	0.5	1.0			20	30		25	10	0	50	24		MS
TQU-5004	TPA	0.5	1.0			20	30		15	8	0	50	16		MS
TQU-5005	TPA	0.5	1.0			20	30		20	8	0	50	20		MS
TQU-5006	TPA	0.5	1.0			20	30		25	8	0	50	24		MS
TQU-5501	TPA	0.6	1.1			20	30		15	11	0	50	16		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-°C	(+°C	in^3	oz.	
TGU-5502	TPA	0.6	1.1			20	30		20	11	0	50	20		MS
TGU-5503	TPA	0.6	1.1			20	30		25	11	0	50	24		MS
TGU-5504	TPA	0.6	1.1			20	30		15	8	0	50	16		MS
TGU-5505	TPA	0.6	1.1			20	30		20	8	0	50	20		MS
TGU-5506	TPA	0.6	1.1			20	30		25	8	0	50	24		MS
TGU-10000	TPA	1.0	2.0			20	30		20	10	0	50	216		MS
TGW-1450	TPA	1.4	2.3			20	30	40	10	6			3	6.0	MS
TGW-1485	TPA	1.4	1.6			20	30	40	15				3	6.0	MS
TGW-2250	TPA	2.2	2.3			20	30	60	15				3	6.0	MS
TGW-2510	TPA	0.2	1.0			20	30		15	9	0	50	20		MS
TGW-2511	TPA	0.2	1.0			20	30		20	9	0	50	24		MS
TGW-2512	TPA	0.2	1.0						25	9	0	50	28		MS
TGW-2571	TPA	0.2	0.8			20	30		15	7	0	50	16		MS
TGW-2572	TPA	0.2	0.8			20	30		20	7	0	50	20		MS
TGW-2573	TPA	0.2	0.8			20	30		25	7	0	50	24		MS
TS-11-18	OSC	0.5	4.0	MC		28	80	10			30	70	75	1.5	EF
TS3102-2	OSC	0.9	1.1	MC				1000							MP
TS3122-2	OSC	1.0	1.5	MC	500			100							MP
TS3152	OSC	1.0	2.0	MC	1K			15							MP
TS3152-2	OSC	1.2	1.8	MC	600			50							MP
TS3152-3	OSC	1.0	2.0	MC				15							MP
TS3371-2	OSC	0.2	0.5	MC				250							MP
TS3751	OSC	0.5	1.0	MC	500			250							MP
TSU-11-15	OSC	0.5	4.0	MC		28	80	10			30	70	75	1.5	EF
U-SERIES	PAR	0.4	1.0		10				17	2	30	55			MM
UHF-5	PAR	*0.4			20				16	1					SK
UHF-6	PAR	*0.4			10				50	1					SK
UHM-4(TX)8750	AMM	8.3	9.1			28	750	40				70			AR
VAU-12A	IPO	9.0	12.4			80		25					/1		VA
VAU-12B	IPO	9.0	12.4			80		50					/1		VA
VAU-12C	IPO	9.0	12.4			80		100					/1		VA
VCO3081	OSC	0.3	0.4			10	9	1			45	85			AL
VFF/C10	TUS	4.0	7.5	VT	104	20	35	15			20	50			FE
VFF/L10	TUS	0.5	1.0	VT	7	20	35	100			20	50	27		FE
VFF/L20	TUS	1.0	1.6	VT	26	20	35	40			20	50			FE
VFF/S10	TUS	1.6	2.5	VT	40	20	35	30			20	50			FE
VFF/S20	TUS	2.5	4.0	VT		20	35	20			20	50			FE
VFF/X10	TUS	7.5	9.0	VT	165	20	35	10			20	50			FE
VFF/X20	TUS	9.0	12.0	VT	210	20	35	10			20	50			FE
VFM103L	AMM	1.5				24	6W	10	300				98		VA
VFM103L2	AMM	1.5				24	6W	10	309				38		VA
VFM103L3	AMM	1.4				24	6W	1	280				29		VA
VFM103040	AMM	0.2				24	6W	100	40				16		VA
VFM103050	AMM	0.2				24	6W	100	50				16		VA
VFM103081	AMM	0.4				24	6W	50	81				21		VA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
VFM103U1U3	AMM	0.5				24	6W	25	103				32		VA
VFM103U15U	AMM	0.8				24	6W	30	150				25		VA
VFA/C1U	TUS	4.0	7.5	VT	104	28	500	*150			40	70			FE
VFA/L1U	TUS	0.5	1.0	VT	7	28	500	1W			40	70			FE
VFA/L2U	TUS	1.6	1.6	VT	26	28	500	1W			40	70			FE
VFA/S1U	TUS	1.6	2.5	VT	40	28	500	400			40	70			FE
VFA/S2UL	TUS	2.5	3.0	VT	55	28	500	300			40	70			FE
VFA/S2UU	TUS	3.0	4.0	VT	70	28	500	200			40	70			FE
VFA/X1U	TUS	7.5	9.0	VT	165	28	500	100			40	70			FE
VFA/X2U	TUS	9.0	12.0	VT	210	28	500	100			40	70			FE
VM-1825/5U-19	MUL	1.8	1.9			72W		100					32	48.0	AR
VM-3600-9	MUL	*3.6				700		50					35	48.0	AR
VM-5800-15	MUL	*5.8				700		20					35	48.0	AR
VM-7850/500-8	MUL	7.0	8.1			2W		100					14	21.0	AR
VPS/VFM15L	AMM	1.4	1.5		86	28	6W	60	24				36		VA
VPS/VFM15S	AMM	2.7	3.0		112	28		30	48				36		VA
VPS/VFM15U4	AMM	0.2	0.3		20	28		280	4				36		VA
VPS/VFM15U8	AMM	0.4	0.8		30	28		200	8				25		VA
VPS/VFM26C	AMM	5.8	6.2		60	28	10W	200	72				30		VA
VPS/VFM26L	AMM	1.4	1.6		45	28		800	37				22		VA
VPS/VFM26S	AMM	2.8	3.2		60	28		400	36				29		VA
VPS/VFM26U3	AMM	0.2	0.3		10	28		2400	3				16		VA
VPS/VFM26U6	AMM	0.4	0.5		20	28		1600	6				20		VA
VPS/VFM31L	AMM	1.8	2.0		96	20	3W	10	24						VA
VPS/VFM31U3	AMM	0.2	0.2		24	20	3W	100	3				8		VA
VPS/VFM31U6	AMM	0.4	0.5		38	20	3W	40	6				13		VA
VPS/VFM32C1	AMM	4.3	4.6		68	20	5W	25	48				19		VA
VPS/VFM32C2	AMM	5.0	5.2		76	20			48				19		VA
VPS/VFM32K1	AMM	13.0	13.5		100	20			144				27		VA
VPS/VFM32K2	AMM	15.2	15.4		100	20			144				38		VA
VPS/VFM32L	AMM	1.1	1.4		4	20		200	12				19		VA
VPS/VFM32U4	AMM	0.4	0.5		4	20		600	4				14		VA
VPS/VFM10UL	AMM	1.0	1.2		44	28		10	12						VA
VPS/VFM10US	AMM	2.0	2.4		88	28		5	24				18		VA
VPS/VFM10U03	AMM	0.2	0.2		15	28	2W	30	3				8		VA
VPS/VFM10U06	AMM	0.5	0.6		28	28		15	6				11		VA
VPS/VFM1045	AMM	1.8	2.0		20	20	9W	200	20				19		VA
VPS/VFM108C	AMM	4.3	4.6		22	28	20W	500	48				41		VA
VPS/VFM108K	AMM	13.0	13.5		132	28		100	144				41		VA
VPS/VFM108L	AMM	1.1	1.4		37	28		3000	12				41		VA
VPS/VFM108S	AMM	2.2	2.4		46	28		1500	24				41		VA
VPS/VFM108U4	AMM	0.4	0.5		20	28		5000	4				25		VA
VPS/VFM108X	AMM	8.6	9.2		88	28		200	96				58		VA
VPS/VFM109C	AMM	4.6	5.0		24	28		400	48				168	2.0	VA
VPS/VFM109S	AMM	2.3	2.5		48	28		1000	24				44		VA

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-°C)	Operating Temp. Ambient (+°C)	Volume in^3	Weight oz.	Manufacturer
VPS/VFM109A	AMM	9.2	10.0		90	28		150	96				74	2.0	VA
VSA9010	GUS	26.5	40.0	MC		76	500	10						2.0	VA
VSA-9010	GSC	27.0	39.5	MC		8	500	10			54	71	/1	2.5	VA
VSA9619A	MUL	31.0	36.0		150	28		5			30	70	54		VA
VSC9603A	MUL	4.4	5.0		550	28		5			0	70	36		VA
VSC9603B	MUL	4.4	5.0		550			100			0	70	36		VA
VSC9604A	MUL	5.0	5.4		50			1000			20	50	45		VA
VSC9605A	MUL	5.0	5.4		50			10			20	50	/42		VA
VSC9605B	MUL	5.5	6.0		50			10			20	65	/42		VA
VSC9620C	MUL	4.0	4.4		40	28		1200			20	50	/53		VA
VSA-9004	GUS	18.0	26.5	MC	500	7	300	18			54	71	/1	4.0	VA
VSL9600A	MUL	1.8	2.0		90	20		10			30	70	/25		VA
VSL9600B	MUL	2.0	2.1		25	-20		4			12	77	/66		VA
VSS9601A	MUL	2.6	2.8		25	28		10			20	50	/35		VA
VSS9601B	MUL	2.6	2.8		25	28		1200			20	50	/53		VA
VSS9602A	MUL	3.0	3.5		30	28		10			10	60	/42		VA
VSU-9002	GUS	12.4	15.0	MC	500	10	300	36			54	71	20	3.0	VA
VSU-9003	GUS	15.0	18.0	MC		10	425	15						4.0	VA
VSU-9006	GUS	12.4	15.0	MC	500	9	175	9			54	71	20	3.0	VA
VSU-9007	GUS	15.0	18.0	MC	500	8	210	9			54	71	20	3.0	VA
VSU-9012	GUS	12.4	15.0	ME		10		10						3.0	VA
VSU-9013	GUS	15.0	18.0	ME		10		10						4.0	VA
VSU-9502A	IPO	12.4	15.0	FX		32	125	10							VA
VSU-9502AT	IPO	12.4	15.0	MC		32	125	10							VA
VSU9502B	IPO	12.4	15.0				40	50							VA
VSU9502BT	IPO	12.4	15.0				40	50							VA
VSU9502C	IPO	12.4	15.0				60	100							VA
VSU9502CT	IPO	12.4	15.0				60	100							VA
VSU9502E	IPO	12.4	15.0				70	150							VA
VSU9502F	IPO	12.4	15.0				80	200							VA
VSU-9503A	IPO	15.0	18.0	FX		32	125	*5							VA
VSU-9503AT	IPO	15.0	18.0	MC		32	125	*5							VA
VSU9503B	IPO	15.0	18.0				40	50							VA
VSU9503BT	IPO	15.0	18.0				40	50							VA
VSU9503C	IPO	15.0	18.0				40	100							VA
VSU9503DT	IPO	15.0	18.0				40	10							VA
VSU9613A	MUL	12.8	13.5		125	28		5			54	71	/28		VA
VSU9614A	MUL	12.8	13.5		125	28		150			54	55	45		VA
VSU9615A	MUL	12.8	15.0		65	28		500			20	50	/69		VA
VSU9616A	MUL	14.5	15.5		85	28		2			30	71	39		VA
VSU9616B	MUL	15.0	15.5		75	28		5			30	71	39		VA
VSU9616C	MUL	15.0	16.0		150	28		100			30	71	/92		VA
VSU9616D	MUL	16.0	16.5		150	28		2			30	71	39		VA
VSU9617A	MUL	15.0	16.0		90	24		250			15	55	/69		VA
VSU9618A	MUL	15.0	15.5		75	28		5			20	60	/35		VA

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-)°C	Operating Temp. Ambient (+)°C	Volume in^3	Weight oz.	Manufacturer
VSx9001	GUS	8.0	12.4	MC		10	500	25						4.0	VA
VSx-9003	GUS	15.0	18.0	MC				15							VA
VSx9005	GUS	8.0	12.4	MC		10	300	5						4.0	VA
VSx9011	GUS	8.2	12.4	ME		10		10						4.0	VA
VSx9500	IPO	8.0	10.0				30	25		/1					VA
VSx-9500A	IPO	8.0	10.0	FX		60		25			20	70	2	4.0	VA
VSx9500B	IPO	8.0	10.0				30	50		/1					VA
VSx9500C	IPO	8.0	10.0				50	100		/1					VA
VSx-9500AT	IPO	8.0	10.0	MC		65		25							VA
VSx-9500BT	IPO	8.0	10.0	MC		65		50							VA
VSx-9500CT	IPO	8.0	10.0	MC		65		100							VA
VSx9500DT	IPO	8.0	10.0	MC			40	10		/1					VA
VSx9500E	IPO	8.0	10.0				70	150		/1					VA
VSx9500ET	IPO	8.0	10.0				70	150		/1					VA
VSx-9501A	IPO	10.0	12.4	FX		65		25							VA
VSx-9501AT	IPO	10.0	12.4	MC		65		25							VA
VSx9501B	IPO*	10.5					50	50							VA
VSx-9501BT	IPO	10.0	12.4	MC		65		50							VA
VSx-9501C	IPO	10.0	12.4	FX		65		100							VA
VSx-9501CT	IPO	10.0	12.4	MC		65		100							VA
VSx9501DT	IPO	10.0	12.4				40	10							VA
VSx9501E	IPO	10.0	12.4				70	150							VA
VSx9501ET	IPO	10.0	12.4				70	150							VA
VSx9501F	IPO	10.0	12.4				80	200							VA
VSx9606A	MOL	8.5	9.5		85	28		500			20	50	/44		VA
VSx9607A	MOL	8.5	9.6		250	28		5			30	70	/53		VA
VSx9608A	MOL	8.5	9.6		250	28		50			40	70	/53		VA
VSx9609A	MOL	8.5	10.5		85	28		100			20	60	42		VA
VSx9610A	MOL	9.5	10.5		95	21		5			54	71	/38		VA
VSx9610B	MOL	9.5	10.5		95	21		450			54	71	110		VA
VSx9611A	MOL	9.5	10.5		250	28		50			20	60	/52		VA
VSx9612A	MOL*	12.0			60	28		2			0	50	/53		VA
VTw-2-5	OSC	0.5	4.0	VI		28	60				30	70	/3	1.5	EF
VTv-2-5	OSC	0.5	4.0	VI				5			30	70	/3	1.5	EF
VTs-25	OSC	0.2	0.5	VI		-30	150	750			30	60	/3	6.0	TC
VTs-50	OSC	0.5	1.0	VI		-30	120	500			30	60	/3	6.0	TC
VTs-100	OSC	1.0	2.0	VI		-20	150	250			30	60	/3	6.0	TC
VTw-1-7	OSC	0.5	4.0	VI		28	60	5			30	70	/3	1.5	EF
VXS9500F	IPO	8.0	10.0				80	200							VA
Wo-569	TOS	1.0	2.0	VI		28	60	10			30	65	3	9.0	WJ
Wo-569-3	TOS	1.0	2.0	VI		28	60	10			30	65	3	9.0	WJ
Wo-569-6	TOS	1.2	2.2	VI		28	60	10			30	65	3	9.0	WJ
Wo-569-8	TOS	1.2	2.2	VI		28	60	10			30	60	3	9.0	WJ
Wo-569-9	TOS	1.3	2.3	VI		28	60	10			30	65	3	9.0	WJ
Wo-569-10	TOS	1.3	1.8	VI		28	60	25			30	65	3	9.0	WJ

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-Pc	(+Pc	in^3	oz.	
WJ-571	TUS	0.5	1.0	VT		28	45	10			30	65	3	9.0	WJ
WJ-572-1	TUS	2.0	3.0	VT		28	60	*5			30	65	3	9.0	WJ
WJ-572-2	TUS	2.4	3.4	VT		28	60	*5			30	65	3	9.0	WJ
WJ-736	TPA	0.5	1.0			15	/1W	1	28	4			4	3.0	WJ
WJ-737	TPA	1.0	2.0			15	/1W	4	28	5			4	3.0	WJ
WJ-738	TPA	0.5	1.0			115	/2W	1	28	4			7	6.0	WJ
WJ-739	TPA	1.0	2.0			115	/2W	4	28	5			7	6.0	WJ
WJ-740	TPA	0.5	1.0			115	/2W	1	28	4			18	10.0	WJ
WJ-741	TPA	1.0	2.0			115	/2W	4	28	5			18	10.0	WJ
WJ2800	OSC	0.5	1.0	VT		24	200	100					4	6.0	WJ
WJ2802	OSC	1.0	2.0	VT		15	250	30					4	6.0	WJ
WJ2803	OSC	1.0	2.0	VT		15	250	40					4	6.0	WJ
WJ2804	OSC	2.0	4.0	VT		15	200	20					4	6.0	WJ
WJ2805	OSC	2.0	4.0	VT		15	200	40					4	6.0	WJ
WJ2810	OSC	1.4	2.4	VT		15	250	40					4	6.0	WJ
WJ2811	OSC	0.3	0.5	VT		24	200	100					4	6.0	WJ
WJ-5004	AMP	2.0	4.0					*12	32	/7			15	18.0	WJ
A-SERIES	PAR	*8.4	*9.8						17	/4	54	60			MM
A-2	PAR	*8.2			20				20	3					SK
A-6	PAR	*7.5			15				20	3					SK
A-8	PAR	*8.0			1K				14	3					SK
A-7	PAR	*9.3			1K				15	3					SK
A-10	PAR	*9.3			200				20	3					SK
A-11	PAR	*8.4			30				20	/3					SK
A915	IPD	8.2	9.6	FX		60		10			40	70		1.5	SS
A916	GUS	8.2	9.6			12	70	2			40	70		1.5	SS
A925	IPD	8.2	12.4			75	30	25			40	70		8.0	SS
A935	IPD	8.2	12.4			75	50	100			40	70		8.0	SS
A-7368-J2	OSC	5.2						5			45	85	19	1.5	ML
A-7368-J3	OSC	7.4						3			45	85	19	1.5	ML
A-7369-J1	OSC	2.1				22	150	5			45	85	19	1.5	ML
XL-1001	PAR	*7.5			35				17	3	54	60			MM
XL-1003	PAR	*7.5			100				17	/3	54	60			MM
XU-105	PRE	0.4	0.6			+25	750	2W						20.0	AP
0500WM	OSC	*9.0			500	5W		15			30	70	/2	3.5	IS
0100WM	OSC	*8.0			500	5W		15			30	70	/2	3.5	IS
0125WV	OSC	*8.2			300	5W		15					/2	3.5	IS
0175WV	OSC	*8.7			300	5W		15					/2	3.5	IS
4A050	AMP	0.5	1.0		25	15	60		25	4	54	71		3.0	LO
4A101	AMP	1.0	2.0		25	15	60		25	5	54	71		3.0	LO
4A103	AMP	1.0	2.6		25	15	60		25		54	71		3.0	LO
4A105	AMP	1.2	1.4		25	15	60		25		54	71		3.0	LO
4A107	AMP	1.4	1.6		25	15	60		25		54	71		3.0	LO
4A201	AMP	2.0	2.4		25	15	60		25	9	54	71		3.0	LO
4A203	AMP	2.2	2.3		25	15	60		25		54	71		3.0	LO

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
4A301	AMP	3.5	4.5		25	15	60		25		54	71		3.0	LO
7M1C3101	PAR	2.2	2.3		25	70	40		17	/3			6	8.0	AL
301X-1-1000	OAM	1.0	2.0			-15	50	*5	23	6	20	70		7.0	VA
2041A	OSC	0.5	1.0			24	200	20			20	70	/12	32.0	KS
2042A	OSC	1.0	2.0			24	200	20			20	70	/8	32.0	KS
2043A	OSC	1.4	2.4			24	200	20			20	70	/9	32.0	KS
2044A	OSC	2.0	4.0			24	200	10			20	70	/6	32.0	KS
4210	OSX	0.5	0.5			15	50	10					/4		ZL
4211	OSX	0.5	1.0			15	65	10					/5		ZL
4213	OSX	0.5	5.5			15	200	10					8		ZL
4214	OSX	5.0	10.0			15	350	10					/9		ZL
4216	OSX	10.0	18.0					10							ZL
4222	OSX	*0.5				28	250	1500					11		ZL
4230	OSX	*0.5				28	250	1500					11		ZL
4231	OSX	*0.5				28	250	1500					11		ZL
4232	OSX	*1.0				28	250	1000					11		ZL
4242	OSX	*1.0				28	250	1000					11		ZL
4243	OSX	*2.0				28	250	500					11		ZL
4244	OSX	*4.0				28	250	400					11		ZL
4245	OSX	*6.0				28	250	200					11		ZL
4255	OSX	*6.0				28	250	200					15		ZL
4257	OSX	*12.0				28	250	100					15		ZL
4258	OSX	*18.0				28	250	50					15		ZL
5000-1100	OSC	1.1	1.3	MC		28	150	10			20	70	10	9.5	TR
5000-1101	OSC	1.6	2.1	MC				10			20	70	10	9.5	TR
5000-1103	OSC	2.0						10			54	71			TR
5000-1303	OSC	2.0						100			0	77			TR
5000-9200	OSC	18.5		FX				50			20	50			TR
5001-9000	OSC	1.0						3			20	70			TR
5003-1301	OSC	3.0	3.2	VT				50			20	70			TR
5003-1302	OSC	3.5	3.7	VT				50			20	70			TR
5003-1303	OSC	2.9	3.1	VT				50			20	70			TR
5003-1600	OSC	4.0	4.2	VT				50			20	70			TR
5004-1000	OSC	0.4	0.5	MC		18		1W			54	70			TR
5004-1001	OSC	*0.5		MC				100			54	100			TR
5004-1100	OSC	1.8	1.8	MC				10			54	55			TR
5004-1300	OSC	1.5	3.0	VT		28		50			40	70	3	4.0	TR
5004-1301	OSC	2.9		FX				50			54	70			TR
5006-9900	OSC	9.0	9.7	ME		20	350	50			55	85	48		TR
5008-9901	OSC	8.5	9.8	ME		20	350	30			55	85	49		TR
5010-1301	OSC	0.9	4.3	FX		33	100	8			55	125	3	4.0	TR
5012-1000	OSC	*0.5		FX		28		6000			40	70	46		TR
5012-1100	OSC	1.0		FX				4000			40	70	46		TR
6000-1300	OSC	2.7	3.0	ME		28	15	15			0	95	2	4.0	TR
6000-1302	OSC	2.9	3.1	MC				10			0	95			TR

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
6000-1303	OSC	2.8	3.2	MC				15			0	70			TR
6000-1305	OSC	3.1	3.4	MC				15			0	95	2	4.0	TR
6000-1306	OSC	3.2	3.6	MC				8			0	95	2	4.0	TR
6000-1307	OSC	2.2	2.7	MC				10			0	95	2	4.0	TR
6001-1100	OSC	1.0	1.0	MC		28	15	20			0	70		7.0	TR
6001-1101	OSC	1.6	2.0	MC				20			0	70		7.0	TR
6001-1102	OSC	1.2	2.2	MC				15			0	70		7.0	TR
6001-1104	OSC	7.0	14.0	MC				100			0	70		7.0	TR
6002-1000	OSC	0.6	0.8	MC		18	20	20			20	70	2	2.0	TR
6002-1001	OSC	0.6	0.8	MC				30			20	70	2	2.0	TR
6003-1000	OSC	0.5	0.8	MC		18	18	25			25	75	1	1.5	TR
6003-1004	OSC	0.3	0.4	MC				50			25	75			TR
6003-1010	OSC	0.4	0.5	MC				25			20	70			TR
6004-1000	OSC	0.8	1.0	MC				15			0	70			TR
6006-1300	OSC	3.2	3.4	VT				50			20	70			TR
6006-1301	OSC	2.6	2.8	VT				50			20	70			TR
6009-1100	OSC	1.1	1.1	MC				15			54	71			TR
6041-1100	OSC	1.8	1.8	VT		15	750	2W			55	85	13		TR
6056-9200	OSC	16.0	17.0	VT		30		15			55	85	21		TR
111001V	OSC	1.0	1.2	ME		28	150	1W			55	71	4	10.0	CL
28450-10 To 22	OSC	0.9	2.3			20	280	250			30	70	22	19.0	MM
28450-38 To 139	OSC	3.6	14.2				200	10					25	23.0	MM
28450-38 To 139	OSX	0.9	14.3				300	10							MM
28450-385 To 665	OSC	3.6	6.8				280	50					25	23.0	MM
28450-385 To 665	OSX	0.9	14.3				375	50							MM
28650 SERIES	OSC	*2.0		MC		20	150				20	71	/2	1.3	OS
28651-18	OSC	*0.3		MC				400			54	71	1	1.3	TR
28651-21	OSC	*0.5		MC		20	150	400			54	71	1	1.3	OS
28651-22	OSC	*0.6		MC		20	150	200			54	71	1	1.3	OS
28651-24	OSC	*0.8		MC		20	150	200			54	71	1	1.3	OS
28653-26	OSC	*1.2		MC		20	100	100			54	71	1	1.3	OS
28653-28	OSC	*1.8		MC		20	100	50			54	71	1	1.3	OS
28653-29	OSC	*2.2		MC		20	100	50			54	71	1	1.3	OS
28670 SERIES	OSC	0.1	1.0	VT		20	150	300			0	71	/2	1.3	OS
28671-60	OSC	0.2	0.5	VT				400			54	71	1	1.3	OS
28672-62	OSC	0.5	1.0	VT				100			54	71	1	1.3	OS
28673-64	OSC	1.0	2.0	VT				25			54	71	1	1.3	OS
28770 SERIES	OSC	1.0	5.0	VT		20	200	50			0	71	2	1.8	OS
35009A	TOS	2.0	4.0	ME		20	100	10			54	50	16	17.0	HP
40080H	OSC	*0.8			48	28		8000		66	40	71	39	28.0	HA
40160H	OSC	*1.6			80	28		4000		66	40	71	39	28.0	HA
40220H	OSC	*2.3			100	28		2000		66	40	71	39	33.0	HA
40320H	OSC	*3.2			160	28		100		66	40	71	39	33.0	HA
40350H	OSX	*3.5						100						16.0	HA
40410H	OSC	*4.1			200	28		50		66	40	71	39	28.0	HA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
40450H	OSX	*4.5						40						20.0	HA
40480H	OSC	*4.8			240	28		50		66	40	71	39	33.0	HA
40550H	OSX	*5.5						40						20.0	HA
40640H	OSC	*6.4			260	28		50		66	40	71	39	33.0	HA
40720H	OSC	*7.2			260	28		50		66	40	71	39	33.0	HA
40800H	OSC	*8.0			260	28		50		66	40	71	39	33.0	HA
40920H	OSC	*9.2			160	28		25		66	40	71	39	33.0	HA
40960H	OSC	*9.6			800	28		25		66	40	71	39	33.0	HA
44010H	ADO	8.0	12.4	ME		80		250			49	60	10	12.0	HA
44012H	ADO	8.0	12.4	ME		80		100			49	60	10	12.0	HA
44013H	ADO	8.0	12.4	ME		80		500			49	60	10	12.0	HA
49340H	MOL					1W		50			54	85		18.0	HA
50337	AMP	0.5	1.0		500			350	23						AR
686523-25	OSC	*1.0		MC		20	100	100			54	71	1	1.3	OS
690012-8452	MIA	0.2	1.0		20			10	20	8			1	1.5	OS
420722	OSC	8.5	10.0			28	110	5			55	85			AT
2004000000	OSC	2.0	4.0			24	225	100			54	71	/3	2.0	AS
2004020000	OSC	2.0	4.0					100					/3		AS
2004020001	OSC	1.4	2.5					100					/2		AS
2004020003	OSC	2.6	5.2					10					2		AS
2004020005	OSC	1.0	2.0					150					/3		AS
2004020006	OSC	3.6	4.3					150					2		AS

5. CHARACTERISTIC LISTING

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
A-2001	AMP	0.1	2.0		20	15H			10		50	70	28		AC
HP35002A	AMP	0.1	0.4			28	45	*7	20	5					HP
DMP/8 SERIES-RF	PRE	0.1	1.0					*10	20	10					RH
HP35004A	AMP	0.1	1.3			20	200	*16	25	10					HP
HP35005A	AMP	0.1	2.0			20	300	*16	40	12					HP
BM605	AMP	0.1	0.2					*20	30	/7					UA
HP35003A	AMP	0.1	0.4			40	200	*23	20	10					HP
AR-SERIES	TPA	0.1	1.0			15	45	27	/3					6.0	AV
BM604	AMP	0.1	0.2					*27	30	10					UA
A5-20-100	TPA	*0.1			22	28	/1A	5W							MM
A-2004	AMP	0.1	0.5			28		10W	30		40	55	/5		AC
A13-30-144	TPA	*0.1			28	28	/1A	13W							MM
A-2005	AMP	0.1	0.5			28		40W	30		10	50	/8		AC
SP-120A	PRE	0.2	0.4					*-6	25	3	20	100	5	4.5	AP
AL20M	TPA	0.2	0.4			15	25	*-3	24	4					AV
SP-300/200	PRE	0.2	0.2			+12	20		30	4					AP
B506	AMP	0.2	0.3			24	30		25	/4					UA
HFW-3(ATX)5-2030	AMP	0.2	0.3						30	/4					AR
TQV-1601	TPA	0.2	0.3			20	30		20	5			10		MS
TQV-1602	TPA	0.2	0.3			20	30		26	5			20		MS
TQV-1603	TPA	0.2	0.3			20	30		32	5			24		MS
TQV-1604	TPA	0.2	0.3			20	30		20	4	0	50	16		MS
TQV-1605	TPA	0.2	0.3			20	30		26	4	0	50	20		MS
TQV-1606	TPA	0.2	0.3			20	30		32	4	0	50	24		MS
TQN-2153	TPA	0.2	0.3			20	30		40	4	0	50	24		MS
TQN-2154	TPA	0.2	0.3			20	30		20	3	0	50	16		MS
TQN-2155	TPA	0.2	0.3			20	30		30	3	0	50	20		MS
TQN-2156	TPA	0.2	0.3			20	30		40	3	0	50	24		MS
B505	AMP	0.2	0.4			24	30		25	/4					UA
TQV-2001	TPA	0.2	0.4			20	30		20	7		16			MS
TQV-2002	TPA	0.2	0.4			20	30		26	7		20			MS
TQV-2003	TPA	0.2	0.4			20	30		32	7			24		MS
TQV-2004	TPA	0.2	0.4			20	30		20	4	0	50	16		MS
TQV-2005	TPA	0.2	0.4			20	30		26	4	0	50	20		MS
TQV-2006	TPA	0.2	0.4			20	30		32	4	0	50	24		MS
QTAI-250A	TUA	0.2	0.5						18	4					MS
QTAI-250B	TUA	0.2	0.5						15	4					MS
TQV-2501	TPA	0.2	0.5			20	30		15	7			16		MS
TQV-2502	TPA	0.2	0.5			20	30		20	7			20		MS
TQV-2503	TPA	0.2	0.5			20	30		25	7			24		MS
TQV-2504	TPA	0.2	0.5			20	30		15	4	0	50	16		MS
TQV-2505	TPA	0.2	0.5			20	30		20	4	0	50	20		MS
TQV-2506	TPA	0.2	0.5			20	30		25	4	0	50	24		MS
TQW-2510	TPA	0.2	1.0			20	30		15	9	0	50	20		MS
TQW-2511	TPA	0.2	1.0			20	30		20	9	0	50	24		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
TGW-2512	TPA	0.2	1.0						25	9	0	50	28		MS
TGW-2571	TPA	0.2	0.8			20	30		15	7	0	50	16		MS
TGW-2572	TPA	0.2	0.8			20	30		20	7	0	50	20		MS
TGW-2573	TPA	0.2	0.8			20	30		25	7	0	50	24		MS
AL15	TPA	0.2	0.3			+15	25	1	26	3		95	/7	6.0	AV
EGM1530	AMP	0.2	0.3			+20		1	25	2			6		EM
AL20	TPA	0.2	0.4			+15	25	1	26	3		95	/7		AV
EGM2040	AMP	0.2	0.4			+20		1	25	3			6		EM
A2410L	TPA	0.2	0.5					1	15	4				/0.8	AE
EGM2550	AMP	0.2	0.5			+20		1	25	3			6		EM
A2301L	TPA	0.2	0.3					2	20	3				/0.8	AE
A2334	TPA	0.2	0.3					2	20	3				/0.8	AE
AG20	TPA	0.2	0.4			+15	25	2	28	2		85	/7	6.0	AV
AG25	TPA	0.2	0.5			+15	25	2	28	2		85	/7	6.0	AV
AL25	TPA	0.2	0.5			+15	25	2	26	3		95	/7	6.0	AV
OTA-1-250	OAM	0.2	0.5			-20	50	*2	20	5	40	55		5.0	VA
ESL1530	AMP	0.2	0.3			+20		5	25	4			7		EM
ALN204	AMP	0.2	0.4			20	30	5	25	4			/10	8.3	OP
ESL2040	AMP	0.2	0.4			+20		5	25	4			7		EM
ESL2550	AMP	0.2	0.5			+20		5	25	4			7		EM
LA-22518 + C	AMP	*0.2						10	30	2					MP
290012-8452	MIA	0.2	1.0		20			10	20	8			1	1.5	OS
A2511	TPA	0.2	0.5					20	25	5				/0.8	
BH606	AMP	0.2	0.4					*20	30	7					UA
BH605	AMP	0.2	0.3					*24	30	6					UA
VPS/VFM10003	AMM	0.2	0.2		13	28	2W	30	3				8		VA
A2615H	TPA	0.2	0.3					80	20	6.				/0.8	AE
VFM103040	AMM	0.2				24	6W	100	40				16		VA
VFM103050	AMM	0.2				24	6W	100	50				16		VA
VPS/VFM3103	AMM	0.2	0.2		24	20	3W	100	3				8		VA
ESH1530	AMP	0.2	0.4			+20		100	25	6			7		EM
ESH2040	AMP	0.2	0.4			+20		100	25	6			7		EM
ESH2550	AMP	0.2	0.5			+20		100	25	7			7		EM
AP20T	TPA	0.2	0.4			+24	250	158	31	6			16	12.0	AV
AP25T	TPA	0.2	0.5			+24	250	158	31	6			16	12.0	AV
VPS/VFM15U4	AMM	0.2	0.3		20	28		280	4				36		VA
A2301H	TPA	0.2	0.3					316	30	4				/0.8	AE
ESK2040	AMP	0.2	0.5			+20		500	25	8			/8		EM
ESK2550	AMP	0.2	0.5			+20		500	25	8			/8		EM
VPS/VFM2603	AMM	0.2	0.3		10	28		2400	3				16		VA
A5-30-200	TPA	*0.2			32	28	/1A	5W							MM
A-245	AMP	0.2	0.5		15	28		75W	30				/8	10.0	AC
SP-130A	PRE	0.3	0.6					*-6	30	4	54	71	5	4.5	AP
AL25M	TPA	0.3	0.5			15	25	*-3	24	/5					AV
SP-450/300	PRE	0.3	0.6			+12	30	*-3	30	5					AP

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
SP-650/700	PRE	0.3	1.0			+12	30	*-3	25	6					AP
AG25M	TPA	0.3	0.5			15	25	*0	24	/3					AV
S194	TPA	0.3	0.4	FX		28			7						RC
B507	AMP	0.3	0.5			24	30		20	4					UA
SP-375/250	PRE	0.3	0.5			+12	20		30	4					AP
B508	AMP	0.3	0.6			24	30		20	5					UA
TQO-3001	TPA	0.3	0.6			20	30		15	7			16		MS
TQO-3002	TPA	0.3	0.6			20	30		20	7			20		MS
TQO-3003	TPA	0.3	0.6			20	30		25	7			24		MS
TQO-3004	TPA	0.3	0.6			20	30		15	4	0	50	16		MS
TQO-3005	TPA	0.3	0.6			20	30		20	4	0	50	20		MS
TQO-3006	TPA	0.3	0.6			20	30		25	4	0	50	24		MS
A3602L	TPA	0.3	1.0					1	20	6				/0.8	AE
A3516L	TPA	0.3	1.0					1	30	6				/0.8	AE
ALN255	AMP	0.3	0.5			20	30	5	25	4			/10	8.3	OP
ALN306	AMP	0.3	0.6			20	30	5	25	4			/10	8.3	OP
ASL3060	AMP	0.3	0.6			15	30	5	25	/4					EM
A2325	TPA	0.3	0.4					6	30	2				/0.8	AE
A251D4	AMP	0.3	1.0			24		10		8	54	71	/10	12.0	OP
A251D2	AMP	0.3	0.5			24		20		5	54	71	/10	12.0	OP
A-32D2	AMP	0.3	0.6			24		20		5	54	71	/10	12.0	OP
AFM4-330	AMM	*0.3			50	28	80	20			30	60	60	48.0	MM
1-200-1K	AMP	*0.3			12			1W			40	55	2		AC
A2-30-267	TPA	*0.3			32	28	/1A	2W							MM
A6-40-289	TPA	*0.3			40	28	/1A	6W							MM
SS1004	PAR	0.4	0.4	MC	10			*-15	17	2			88	H1.4	RC
UHF-5	PAR	*0.4			20				16	1					SK
UHF-6	PAR	*0.4			10				50	1					SK
NTAC-425B	TDA	0.4	0.4			115			17	3			168		MS
NTAC-425B(2)	TDA	0.4	0.4			115			30	3			950		MS
TQN-3941	TPA	0.4	0.4			20	30		20	4	0	50	16		MS
TQN-3942	TPA	0.4	0.4			20	30		30	4			20		MS
TQN-4041	TPA	0.4	0.4			20	30		20	6	0	50	16		MS
TQN-4042	TPA	0.4	0.4			20	30		30	6	0	50	20		MS
TQN-4043	TPA	0.4	0.4			20	30		40	6	0	50	24		MS
TQN-4044	TPA	0.4	0.4			20	30		20	4	0	50	16		MS
TQN-4045	TPA	0.4	0.4			20	30		30	4	0	50	20		MS
TQN-4046	TPA	0.4	0.4			20	30		40	4	0	50	24		MS
TQO-4001	TPA	0.4	0.8			20	30		15	8			16		MS
TQO-4002	TPA	0.4	0.8			20	30		20	8			20		MS
TQO-4003	TPA	0.4	0.8			20	30		25	8	0	50	24		MS
TQO-4004	TPA	0.4	0.8			20	30		15	7	0	50	16		MS
TQO-4005	TPA	0.4	0.8			20	30		20	7	0	50	20		MS
TQO-4006	TPA	0.4	0.8			20	30		25	7	0	50	24		MS
U-SERIES	PAR	0.4	1.0		10				17	2	30	55			MM

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-PC	(+PC	in^3	oz.	
ALN408	AMP	0.4	0.8			20	30	5	25	4			/10	8.3	OP
LA-2451B & C	AMP	*0.4						10	30	2					MP
TQN-3943	TPA	0.4	0.4			20	30	40	4		0	50	24		MS
VPS/VFM31U6	AMM	0.4	0.5		38	20	3W	40	6				13		VA
VFM103U81	AMM	0.4				24	6W	50	81				21		VA
VPS/VFM15U8	AMM	0.4	0.6		30	28		200	8				25		VA
VPS/VFM32U4	AMM	0.4	0.5		4	20		600	4				14		VA
VPS/VFM26U6	AMM	0.4	0.5		20	28		1600	6				20		VA
VPS/VFM108U4	AMM	0.4	0.5		20	28		5000	4				25		VA
XO-105	PRE	0.4	0.6			&25	750	2W						20.0	AP
AG50M	TPA	0.5	1.0			15	25	*-6	22	4					AV
EGR5001	AMP	0.5	1.0			&20		*-5	25	6			/8		EM
EGR50011LN	AMP	0.5	1.0			&20		*-5	25	4			/8		EM
AG50	TPA	0.5	1.0			&15	25	*-3	24	4		85	/7	6.0	AV
SP-750/500	PRE	0.5	1.0			&12	28	*-3	25	6					AP
BB509	AMP	0.5	1.0			24	30		20	6					UA
HFW-4%XPTH-50100	AMP	0.5	1.0						16	11					AR
MP5-1/2SERIESUHF	PRE	0.5	1.0			&12			25	/9					RH
OTAI-500A	TDA	0.5	1.0						15	6					MS
OTAI-500B	TDA	0.5	1.0						15	5					MS
Q3205	PRE	0.5	1.0							/10			10		AE
TQO-5001	TPA	0.5	1.0			20	30		15	10	0	50	16		MS
TQO-5002	TPA	0.5	1.0			20	30		20	10	0	50	20		MS
TQO-5003	TPA	0.5	1.0			20	30		25	10	0	50	24		MS
TQO-5004	TPA	0.5	1.0			20	30		15	8	0	50	16		MS
TQO-5005	TPA	0.5	1.0			20	30		20	8	0	50	20		MS
TQO-5006	TPA	0.5	1.0			20	30		25	8	0	50	24		MS
4A050	AMP	0.5	1.0		25	15	60		25	4	54	71		3.0	LO
A3510L	TPA	0.5	1.0					1	15	4				/0.8	AE
ESN5001	AMP	0.5	1.0			&20		1	25	6			/8		EM
ESN5001LN	AMP	0.5	1.0			&20		1	25	5			/8		EM
SP-141B	PRE	0.5	1.0					1	24	6	54	71	5	4.5	AP
WJ-736	TPA	0.5	1.0			15	/1W	1	28	4			4	3.0	WJ
WJ-738	TPA	0.5	1.0			115	/2W	1	28	4			7	6.0	WJ
WJ-740	TPA	0.5	1.0			115	/2W	1	28	4			18	10.0	WJ
A3808L	TPA	0.5	1.0					2	25	4				/0.8	AE
OTX-1-500	OAM	0.5	1.0			-15	40	*2	20	5	40	55		5.0	VA
AL50M	TPA	0.5	1.0			12	30	*3	24	6					AV
AL50M-A	TPA	0.5	1.0			12	30	*3	24	6					AV
AL50	TPA	0.5	1.0			&12	30	4	25	7		95	/7		AV
AL50A	TPA	0.5	1.0			&12	30	4	25	5		95	/7	6.0	AV
ALN459	AMP	0.5	1.0			20	30	5	25	4			/10	8.3	OP
ALN501	AMP	0.5	1.0			20	30	5	25	4			/10	8.3	OP
ESN5001A	AMP	0.5	1.0			15	35	5	24	/5					EM
ESN5001LNA	AMP	0.5	1.0			15	35	5	24	/4					EM

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
G3122	PRE	0.5	1.0					*5		/9			10		AE
AMP1500N	TPA	0.5	1.5			15	60	*8	25	8					AV
LA-2501B	AMP	*0.5						10	30	/3					MP
ESM5001	AMP	0.5	1.0			+20		10	25	8			/8		EM
VPS/VFM10006	AMM	0.5	0.6		28	28		15	6				11		VA
A52D2	AMP	0.5	1.0			24		20		6	54	71	/10	12.0	OP
VFM103U103	AMM	0.5				24	6W	25	103				32		VA
50337	AMP	0.5	1.0		500			350	23					•	AR
A3-30-387	TPA	*0.4			30	28	/1A	3W							MM
A5-25-500	TPA	*0.5			20	28	/1A	5W							MM
SS1000	TPA	0.5	1.0		10			5W				50			MD
A5-25-470	TPA	*0.5			25	28	/1A	/6W							MM
G3203	PRE	0.6	1.2					*-5		/11			/8		AE
TQU-5501	TPA	0.6	1.1			20	30		15	11	0	50	16		MS
TQU-5502	TPA	0.6	1.1			20	30		20	11	0	50	20		MS
TQU-5503	TPA	0.6	1.1			20	30		25	11	0	50	24		MS
TQU-5504	TPA	0.6	1.1			20	30		15	8	0	50	16		MS
TQU-5505	TPA	0.6	1.1			20	30		20	8	0	50	20		MS
TQU-5506	TPA	0.6	1.1			20	30		25	8	0	50	24		MS
ALN511	AMP	0.6	1.1			20	30	5	25	/6			/10	8.3	OP
A551D2	AMP	0.6	1.1			24		20		6	54	71	/10	12.0	OP
NTAC-750B	TDA	0.7	0.8			+15			17	4			560		MS
AL70M	TPA	0.7	0.9			12	30	*0	24	8					AV
AL70	TPA	0.7	0.9			+12	30	2	25	7		95	/7	6.0	AV
ALN790	AMP	0.7	0.9			20	30	5	25	/5			/10	8.3	OP
FLD3077-1	PRE	0.7	0.9		2	22	12	100W						6.2	AL
TQN-8001	TPA	0.8	0.8			20	30		20	8	0	50	16		MS
TQN-8002	TPA	0.8	0.8			20	30		30	8	0	50	20		MS
TQN-8003	TPA	0.8	0.8			20	30		40	8	0	50	24		MS
TQN-8004	TPA	0.8	0.8			20	30		20	6	0	50	16		MS
TQN-8005	TPA	0.8	0.8			20	30		30	6	0	50	20		MS
TQN-8006	TPA	0.8	0.8			20	30		40	6	0	50	24		MS
A3524L	TPA	0.8	0.8					1	15	4				/0.8	AE
ALN812	AMP	0.8	1.3			20	30	5	25	5			/10	8.3	OP
A11000N	TPA	0.8	1.0			15	25	* 5	23	/4					AV
VFM103U150	AMM	0.8				24	6W	30	150				25		VA
A6-100-800	TPA	*0.8			100	28	/1A	6W							MM
NTAC-900B	TDA	0.9	0.9			115			18	4			588		MS
NTAC-944B(2)	TDA	0.9	0.9			28			30	4			10H		MS
NTAC-956	TDA	0.9	0.9			12			17	4			343		MS
A6-100-850	TPA	*0.9			100	28	/1A	6W							MM
A6-100-900	TPA	*0.9			100	28	/1A	6W							MM
ALN120	AMP	1.0	2.0			20	30	-10	25	6			/10	8.3	OP
AS1000N	TPA	1.0	2.0			-15	30	*-9		/8					AV
A4611	TPA	1.0	2.0					*-8	15	6				/0.8	AE

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
A4612	TPA	1.0	2.0					*-8	20	6				/0.8	AE
AM1000N	TPA	1.0	2.0			-15	30	*-6	28	5		85	/12		AV
NTAC-1040B	TDA	1.0	1.1			15			17	4			88		MS
NTAC-1250B	TDA	1.0	1.5			28			13	6			231		MS
A4636	TPA	1.0	2.0			15	25		16	6	54	55	6	12.0	AE
A4637	TPA	1.0	2.0			15	75		20	6	54	55	6	12.0	AE
A4638	TPA	1.0	2.0			15	90		26	6	54	55	/12	14.0	AE
A4639	TPA	1.0	2.0			15	110		32	6	54	55	13	16.0	AE
A4719	TPA	1.0	2.0			15	100		18	/7	54	71	/7	10.0	AE
A4720	TPA	1.0	2.0			15	120		26	/7	54	71	/9	12.0	AE
A4721	TPA	1.0	2.0			15	140		32	/7	54	71	10	14.0	AE
A4722	TPA	1.0	2.0			15	160		40	/7	54	71	12	16.0	AE
CH-1	MIA	1.0	2.0			12	20			8	55	85			MA
MP1-2/2SERIES-L	PRE	1.0	2.0			+12			25	/8					RH
MMP1 SERIES	PRE	1.0	2.0			+12			25	7			/2	2.5	RH
MMP/5-L SERIES	MIA	1.0	2.0			12			25	7			/5	6.0	RH
MMP/6-L SERIES	MIA	1.0	2.0			12			25	7			/2	2.5	RH
OTAI-1000A	TDA	1.0	2.0						15	4					MS
OTC-1000A	TDA	1.0	2.0						15	5					MS
OTC-1000B	TDA	1.0	2.0						15	4					MS
G4114	PRE	1.0	2.0							/11			/9		AE
S-5245	PRE	1.0	2.0			20	100			/9	30	85	5	3.8	SE
SP-1500/1000	PRE	1.0	2.0						25	5	54	85		3.5	AP
SPS-1500/1000	PRE	1.0	2.0				2W		25	9					AP
TQC-10000	TPA	1.0	2.0			20	30		20	10	0	50	216		MS
4A101	AMP	1.0	2.0		25	15	60		25	5	54	71		3.0	LO
4A103	AMP	1.0	2.6		25	15	60		25		54	71		3.0	LO
WJ-737	TPA	1.0	2.0			15	/1W	4	28	5			4	3.0	WJ
WJ-739	TPA	1.0	2.0			115	/2W	4	28	5			7	6.0	WJ
WJ-741	TPA	1.0	2.0			115	/2W	4	28	5			18	10.0	WJ
ALN150	AMP	1.0	1.5			20	30	5	25	/6			/10	8.3	OP
G4204	PRE	1.0	2.0					*5		11			/9		AE
30TX-1-1000	OAM	1.0	2.0			-15	50	*5	23	6	20	70		7.0	VA
A4727	TPA	1.0	2.6			20	140	*6	20	7	54	71	8	12.0	AE
A4809	TPA	1.0	2.6			20	160	*6	28	7	54	71	8	14.0	AE
AWM-4000FN	TPA	1.0	4.0			15	80	*7	/2	10			/10	9.0	AV
AWM-4000N	TPA	1.0	4.0			15	80	*7	/2	10			/10	9.0	AV
AMP2600N	TPA	1.0	2.6			+15	50	8	33	8		85	10		AV
AMM2000M SERIES	TPA	1.0	2.0			-15	100	*10		6					AV
AMM-2000M05-16	AMP	1.0	2.0			15	170	*10	48	8			24		AV
AMP1000N	TPA	1.0	2.0			+15	60	10	27	5		85	10	14.0	AV
LA-2991B	AMP	*1.0						10	30	4					MP
VPS/VFM100L	AMM	1.0	1.2		44	28		10	12						VA
G4204H	PRE	1.0	2.0					*20		13			/9		AE
NTAC-1090B	TDA	1.1	1.1			12			15	4			101		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
NTAC-1150	TDA	1.1	1.2			12			17	4			70		MS
LA-2102B	AMP	*1.1						10	30	4					MP
VPS/VFM32L	AMM	1.1	1.4		4	20		200	12				19		VA
VPS/VFM108L	AMM	1.1	1.4		37	28		3000	12				41		VA
SS1005	PAR	1.2	1.4	MC	10			*-15	17	3			352	H1.4	RC
SS-1027	PAR	1.2	1.4	MC	10			*-15	15	1			960	H1.4	RC
L SERIES	TPA	1.2	2.7		400	28		*-10	25	6	20	71	21		IM
G SERIES	TPA	1.2	2.8		450	28		*-4	40	5	20	71	21		IM
NTAC-1035B	TDA	1.2	1.4						17	4			70		MS
NTAC-1300	TDA	1.2	1.4			16			15	4			144		MS
NTAC-1350B	TDA	1.2	1.4			115			17	4			70		MS
4A105	AMP	1.2	1.4		25	15	60		25		54	71		3.0	LO
AM1200N	TPA	1.2	1.4			-15	25	1	28	4		85	/12		AV
H SERIES	TPA	1.2	2.8		450	28		*6	40	5	20	71	21		IM
S SERIES	TPA	1.2	2.8		450	28		*6	40	6	55	85	21		IM
SS500	TDA	1.3	1.3		50			*-15	20	6			15	8.0	RC
L-SERIES	PAR	1.3	1.7		20				17	1	30	60	432		MM
NTAC-1420	TDA	1.4	1.4			15			17	4			70		MS
NTAC-1450B	TDA	1.4	1.5			28			15	4			70		MS
Q4205	PRE	1.4	1.5							9			/8		AE
NTAC-1485B	TDA	1.4	1.6			28			20	4			144		MS
4A107	AMP	1.4	1.6		25	15	60		25		54	71		3.0	LO
ALN115	AMP	1.4	1.5			20	30	0	25	/5			/10	8.3	OP
AM1435N	TPA	1.4	1.6			-15	25	1	28	4		85	/12		AV
VFM103L3	AMM	1.4				24	6W	1	280				29		VA
A4505	TPA	1.4	1.5					2	20	5				/0.8	AE
AM2300N-07	TPA	1.4	2.3			15	65	*6	30	6					AV
AMP2300N	TPA	1.4	2.3			+15	60	8	26	6		85	10		AV
AM1540N	TPA	1.4	1.5			15	50	*9	30	/5					AV
A154N	AMP	1.4	1.5			24		10		/5	54	71	/10	12.0	OP
AMM2300M SERIES	TPA	1.4	2.3			-12	90	*10		/7					AV
A4717	TPA	1.4	2.3			20	140	*12	20	7	54	71	8	12.0	AE
TQW-1450	TPA	1.4	2.3			20	30	40	10	6			3	6.0	MS
TQW-1485	TPA	1.4	1.5					40	15	4			3	6.0	MS
TQW-1485	TPA	1.4	1.6			20	30	40	15				3	6.0	MS
VPS/VFM15L	AMM	1.4	1.5		80	28	6W	60	24				36		VA
VPS/VFM26L	AMM	1.4	1.6		45	28		800	37				22		VA
TP-8-1435	PRE	*1.5			100	15	25		25	/6	20	70	/7		VA
SP-2250/1500	PRE	1.5	3.0			+12	50		25	9					AP
VFM103L	AMM	1.5				24	6W	10	300				98		VA
VFM103L2	AMM	1.5				24	6W	10	309				38		VA
SS-1030	PAR	1.6	1.7	MC	15			*-15	15	2			960	H1.4	RC
NTAC-1610	TDA	1.6	1.6			28			17	4			70		MS
NTAC-1675	TDA	1.6	1.7			15			17	4			512		MS
A4608	TPA	1.6	2.0					2	20	5				/0.8	AE

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
L-6	PAR	*1.7			50				17	2					SK
NTAC-1730	TDA	1.7	1.8			15			17	4			70		MS
NTAC-1750	TDA	1.7	1.8			230			18	4			512		MS
K-SERIES	PAR	1.7	2.4		20				17	/2	30	60	432		MM
A185N	AMP	1.7	1.9			24		5		/6	54	71	/10	12.0	OP
A172N	AMP	1.7	1.7			24		10		/6	54	71	/10	12.0	OP
NTAC-1815	TDA	1.8	1.8			115			19	4			70		MS
VPS/VFM31L	AMM	1.8	2.0		96	20	3W	10	24						VA
VPS/VFM1045	AMM	1.8	2.0		20	20	9W	200	20				19		VA
S230	TPA	1.8	2.0	MC	100	25	350	1250			20	70	33	40.0	RC
NTAC-1880	TDA	1.9	1.9			20			15	4			416		MS
NTAC-1940	TDA	1.9	2.0			115			19	4			384		MS
S201	TPA	1.9	2.0		20	-24	625						33		RC
PC00AA	AMP	*2.0		MC	20				20	2	54	71	36		IS
NTAC-2100B	TDA	2.0	2.2			115			17	4			130		MS
4A201	AMP	2.0	2.4		25	15	60		25	9	54	71		3.0	LO
CH-2	MIA	2.0	4.0			12	20			8	55	85			MA
MMP2 SERIES	PRE	2.0	4.0			+12			25	/8			/2	2.5	RH
MMP/6-S SERIES	MIA	2.0	4.0			12			25	/8			12	2.5	RH
MMP/5-S SERIES	MIA	2.0	4.0			12				/8			15	6.0	RH
MP2-4/2SERIES-S	PRE	2.0	4.0			+12			25	/8					RH
MPS-1	PRE	2.0	4.0			+12	15		15	11					AP
OTC-2000A	TDA	2.0	4.0						15	6					MS
OTC-2000B	TDA	2.0	4.0						15	4					MS
G5114	PRE	2.0	4.0							9			/8		AE
G5213	PRE	2.0	4.0							12			9		AE
G5214	PRE	2.0	4.0							/12			/9		AE
SP-3000/2000	PRE	2.0	4.0			+12	50		20	10					AP
SPS-3000/2000	PRE	2.0	4.0				2W		20	10					AP
S-5355	PRE	2.0	4.0			20	100			/9	30	80	/4	3.7	SE
VPS/VFM100S	AMM	2.0	2.4		88	28		5	24				18		VA
A5802	TPA	2.0	3.5			20	160	*8	20	10	54	71	8	13.0	AE
A5804	TPA	2.0	4.0			20	190	*8	20	11	54	71	9	15.0	AE
AM-4000FN	TPA	2.0	4.0			15	80	*8	30	9	54	95		9.0	AV
AM-4000N	TPA	2.0	4.0			15	80	*8	30	9	54	95		9.0	AV
AMP3500N	TPA	2.0	3.5			-15	125	10	26	8		85	/12		AV
WJ-5004	AMP	2.0	4.0					*12	32	/7			13	18.0	WJ
G5214H	PRE	2.0	4.0					*20		/14			/9		AE
L-9	PAR	*2.1			10				20	/3					SK
NTAC-2113B	TDA	2.1	2.1			15			20	4			105		MS
SS-1006	PAR	2.2	2.3	MC	10			*-15	17	3			288	H1.3	RC
SS-1028	PAR	2.2.	2.3	MC	15			*-15	15	2			480	H1.3	RC
NTAC-2215B	TDA	2.2	2.2			115			17	4			70		MS
NTAC-2250-6	TDA	2.2	2.3			18			20	4	0	50	88		MS
NTAC-2250B(2)	TDA	2.2	2.3			15			30	4			120		MS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
PAR1612A	PAR	2.2	2.3		35	60	20		17	/3			/29	32.0	AL
G5215	PRE	2.2	2.3							9			/8		AE
R-2000	PAR	2.2	2.3						20	1				42.0	MM
4A203	AMP	2.2	2.3		25	15	60		25		54	71		3.0	LO
7M1C3101	PAR	2.2	2.3		25	70	40		17	/3			6	8.0	AL
ALN223	AMP	2.2	2.3			20	30	0	25	/6			/10	8.3	OP
AM2200N	TPA	2.2	2.3			-15	30	1	28	6		85	11		AV
SS1000	PAR	2.2	2.3		100			1	15	7				5.0	RC
A5602	TPA	2.2	2.3					2	20	6				/0.8	AE
A230N	AMP	2.2	2.3			24		5		6	54	71	/10	12.0	OP
AM2300N	TPA	2.2	2.3			15	65	*8	30	6					AV
A5706	TPA	2.2	2.3			20	65	*12	20	/7	54	71	/9	7.0	AE
TQN-2250	TPA	2.2	2.3			20	30	60	15	6			3	6.0	MS
TQW-2250	TPA	2.2	2.3			20	30	60	15				3	6.0	MS
VPS/VFM1085	AMM	2.2	2.4		46	28		1500	24				41		VA
L-7	PAR	*2.3			400				12	2					SK
L-8	PAR	*2.3			150				15	2					SK
TP-8-2200	PRE	*2.3			100	15	25		25	/6	20	70	/7		VA
NTAC-2335B	TDA	2.3	2.4			12			15	4			70		MS
VPS/VFM1095	AMM	2.3	2.5		48	28		1000	24				44		VA
G5115B	PRE	2.5	4.0					*-5		10			8		AE
S-8	PAR	*2.5			25				20	8					SK
NTAC-2800B	TDA	2.7	2.9			115			17	4			125		MS
PAR1618A	PAR	2.7	2.9		20		20		17		0	50	320	H1.6	AL
S1005 + S1006	PAR	2.7	2.9		7				17	/3	30	60	550		MM
S-SERIES	PAR	2.7	3.9						17	/3	30	60	550		MM
VPS/VFM15S	AMM	2.7	3.0		112	28		30	48				36		VA
S128	TDA	*2.8			500				18	6			33	40.0	RC
VPS/VFM26S	AMM	2.8	3.2		60	28		400	36				29		VA
SS-1015	PAR	2.9	3.1	MC	12			*-15	17	3			238	H1.1	RC
SS-1029	PAR	2.9	3.1	MC	30			*-15	15	2			480	H1.3	RC
NTAC-3000B(2)	TDA	2.9	3.1			22			25	4			180		MS
S-6	PAR	*3.0			600				12	2					SK
S-7	PAR	*3.0			850				14	2					SK
FLD3078-1	PRE	3.0	6.0		2	22	12	150W						3.0	AL
NTAC-3300(2)	TDA	3.1	3.5			220			25	4			108		MS
NTAC-3750B	TDA	3.5	4.0			115			13	4			70		MS
4A301	AMP	3.5	4.5		25	15	60		25		54	71		3.0	LO
FM-100	PRE	3.5	14.0			+28	650	25						24.0	AP
NTAC-3675B	TDA	3.6	3.8			115			17	4			101		MS
NTAC-3950B	TDA	3.7	4.2			12			12	5			420		MS
G5314	PRE	3.7	4.2							/10			/8		AE
15505A	TDA	3.7	4.2						/1	/5		40	72	53.0	AE
15505B	TDA	3.7	4.2						/1	5		40	72	53.0	AE
15505C	TDA	3.7	4.2						/1	5		40	72	53.0	AE

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
15529	TDA	3.7	4.2						/1	5		40	116	70.0	AE
15598	TDA	3.7	4.2			-24			/1	5		40	58	39.0	AE
15598A	TDA	3.7	4.2			-24			/1	/5		55	33	49.0	AE
15720	TDA	3.7	4.2			+24			1	7		40	293	48.0	AE
16636	TDA	3.7	4.2						/1	/6		45	53	49.0	AE
16636A	TDA	3.7	4.2						/1	/5		45	53	49.0	AE
5156	TDA	3.9	4.0		50	7	/4		13	5	20	70	64	16.0	RC
CH-4	MIA	4.0	8.0			12	20			8	55	85			MA
MMP4 SERIES	PRE	4.0	8.0			+12			25	/9			/2	2.5	RH
MMP/5-C SERIES	MIA	4.0	8.0			12			25	/9			/5	6.0	RH
MMP/6-C SERIES	MIA	4.0	8.0			12			25	/9			/2	2.5	RH
MP4-8/2SERIES-C	PRE	4.0	8.0			+12			25	8					RH
MPC-1	PRE	4.0	8.0			+12	15		15	12					AP
OTC-4000A	TDA	4.0	8.0						15	6					MS
OTC-4000B	TDA	4.0	8.0						15	5					MS
G6124	PRE	4.0	8.0							10			7		AE
G6207	PRE	4.0	8.0							/13			9		AE
G6301	PRE	4.0	8.0							/13			7		AE
G6302B	PRE	4.0	8.0					*-5		/14			9		AE
G6301H	PRE	4.0	8.0					*10		13			7		AE
5157	TDA	4.1	4.2		50	7	/4		13	5	20	70	64	16.0	RC
AFM192-4175	AMM	*4.1			150	24	150	10					30	24.0	MM
VPS/VFM32C1	AMM	4.3	4.6		60	20	5W	25	48				19		VA
VPS/VFM108C	AMM	4.3	4.6		22	28	20W	500	48				41		VA
NTAC-4700B	TDA	4.4	5.0			28			17	4			30		MS
P701	TDA	4.4	5.0						18	5	0	55	121	56.0	PL
C-SERIES	PAR	4.5	7.2						17	/4	30	60			MM
VPS/VFM109C	AMM	4.6	5.0		24	28		400	48				168	2.0	VA
NTAC-5000B	TDA	4.8	5.2			<30			17	4			80		MS
VPS/VFM32C2	AMM	5.0	5.2		70	20			48				19		VA
NTAC-5500B	TDA	5.0	6.0			28			15	5			48		MS
NTAC-5650B	TDA	5.4	5.9			115			17	4			60		MS
SS-2100	TDA	5.4	7.1		500				14	5	20	70	26	12.5	RC
VPS/VFM26C	AMM	5.8	6.2		60	28	10W	200	72				30		VA
NTAC-6175B	TDA	5.9	6.4			115			17	4			17		MS
S-144V1	TDA	5.9	6.4		500	24	175		15	4	20	70	33	16.0	RC
NTAC-6390B	TDA	6.2	6.6			12			17	4			17		MS
AFM96-6300	AMM	*6.3			200	20	300	20					48	48.0	MM
AFM54-6600	PAR	*6.6			500	28	400	50					/85	56.0	MM
5174	TDA	6.9	7.1			24	25		13	5			95	16.0	RC
5166	TDA	6.9	7.3			/8	4		14	5			68	16.0	RC
NTAC-7275B	TDA	7.1	7.4			12			17	5			18		MS
AFM60-7100	AMM	*7.1			500	28	400	20					/85	56.0	MM
FLU3079-1	PRE	7.2	9.8		2	22	12	200W						3.0	AL
5188	TDA	7.4	7.6			7			13	5			26	13.0	RC

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)Pc	(+)Pc	in^3	oz.	
XL-1003	PAR	*7.5			100				17	/3	54	60			MM
S197	TDA	7.5	7.8		300	7	/4		13	/6			16	16.0	RC
MP-X SERIES	MIA	7.5	8.5			12			25	7					UA
MP772 SERIES-X	PRE	7.5	8.5			+12			25	7					RH
S189	TDA	7.6	7.7			7			13	5			26	13.0	RC
X-6	PAR	*8.0			1K				14	3					SK
MPU-K SERIES	MIA	8.0	12.0			12			25/10						UA
MPU10/7SERIES-K	PRE	8.0	12.0			+12	40		20	11					RH
OTC-8000A	TDA	8.0	12.0						15	6					MS
OTC-8000B	TDA	8.0	12.0						15	6					MS
G7126	PRE	8.0	12.0							11			7		AE
G7215	PRE	8.0	12.0							13			9		AE
X-2	PAR	*8.2			20				20	3					SK
G7301	PRE	8.0	12.0					*5		/14			7		AE
P702	TDA	8.2	9.0			28	10		16	6	0	55	26	16.0	PL
MPU10/2 SERIES-K	PRE	8.3	12.0			+12			25	10					RH
UHM-4(TX)8750	AMM	8.3	9.1			28	750	40				70			AR
X-11	PAR	*8.4			30				20	/3					SK
X-SERIES	PAR	*8.4	*9.8						17	/4	54	60			MM
NTAC-8750B	TDA	8.5	9.0			15			15	5			18		MS
MP-X SERIES	MIA	8.5	9.6			12			25	7					UA
MPU8/2 SERIES-X	PRE	8.5	9.6			+12			25	8					RH
MPU8/7SERIES-X	PRE	8.5	9.6			+12	40		20	9					RH
MP8/2 SERIES-X	PRE	8.5	9.6			+12			25	7					RH
MPU-X SERIES	MIA	8.5	9.6			12			25	8					UA
OTL-9	MIA	8.5	9.6			12	20			8	55	85			MA
OTL-9P	MIA	8.5	9.6			12				8	55	85			MA
OTL-9	MIA	8.5	9.6			12	20			8	55	85			MA
OTL-9P	MIA	8.5	9.6			12	20			8	55	85			MA
NTAC-9150	TDA	8.5	9.6						15	5			12		MS
S-9	MIA	8.5	9.6			12	20		8	55	85				MA
SS-9P	MIA	8.5	9.6			12	20		8	55	85				MA
S164	TDA	8.5	9.6	MC	75	24	80	10					13	5.0	RC
VPS/VFM108X	AMM	8.6	9.2		88	28		200	96				58		VA
NTAC-8900	TDA	8.8	8.9			12			15	4			6		MS
PA-90AA	AMP	*9.0		MC	15				17	/2	54	71	36		IS
NTAC-9080	TDA	9.0	9.2			115			17	5			90		MS
NTAC-9240	TDA	9.2	9.3			115			17	5			36		MS
SS2106	TDA	9.2	9.7			-/5	5	10	15	17	40	70	3	16.0	RC
VPS/VFM109X	AMM	9.2	10.0		96	28		150	96				74	2.0	VA
X-7	PAR	*9.3			1K				15	3					SK
X-10	PAR	*9.3			200				20	3					SK
NTAC-9575	TDA	9.3	9.5			115			15	5			36		MS

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-Pc)	Operating Temp. Ambient (+Pc)	Volume in^3	Weight oz.	Manufacturer
NTAC-9400B(3)	TDA	9.5	9.5			115			45	5			128		MS
NTAC-9570B	TDA	9.4	9.7			115			17	5			48		MS
MP-X SERIES	MIA	9.5	10.2			12			25	8					UA
MP9/2 SERIES-X	PRE	9.5	10.2			+12			25	8					RH
MPU-X SERIES	MIA	9.5	10.2			12			25	/9					UA
MP09/2 SERIES-X	PRE	9.5	10.2			+12			25	/9					RH
NTAC-1030B	TDA	9.8	10.8			18			15	5			24		MS
OTL-10	MIA	10.0	11.0			12	20			9	55	85			MA
OTL-10P	MIA	10.0	11.0			12	20			9	55	85			MA
OTL-11	MIA	10.7	11.7			12	20			9	55	85			MA
OTL-11P	MIA	10.7	11.7			12	20			9	55	85			MA
NC-13001	TDA	12.9	13.9			24			45	6			48		MS
AFM40-10400	AMM	*10.4			300	28	100	5					36	40.0	MM
VPS/VFM32K1	AMM	13.0	13.5		100	20			144				27		VA
OTL-13	MIA	13.0	14.0			12	20			10	55	85			MA
OTL-13P	MIA	13.0	14.0			12	20			10	55	85			MA
SS-13	MIA	13.0	14.0			12	20		10	55	85				MA
SS-13P	MIA	13.0	14.0			12	20		10		55	85			MA
VPS/VFM108K	AMM	13.0	13.5		132	28		100	144				41		VA
NTAC-15,500	TDA	15.0	16.3			15			50	6			540		MS
VPS/VFM32K2	AMM	15.2	15.4		100	20			144				38		VA
OTL-16	MIA	15.5	17.5			12	20			10	55	85			MA
OTL-16P	MIA	15.5	17.5			12	20			10	55	85			MA
SS-16	MIA	15.5	17.5			12	20			10	55	85			MA
SS-16P	MIA	15.5	17.5			12	20			10	55	85			MA
NTAC-16,000B	TDA	15.9	16.3			18			15	6			60		MS
NTAC-17,000B	TDA	16.8	17.2			22			15	7			12		MS
NTAC-19,000B	TDA	18.9	19.1			22			15	7			6		MS
SS-23	MIA	23.0	25.0			12	20			12	55	85			MA
SS-23P	MIA	23.0	25.0			12	20			12	55	85			MA
S-35	MIA	34.0	36.0			12	20			13	55	85			MA
SS-35P	MIA	34.0	36.0			12	20			13	55	85			MA
KA-1	PAR	*35.0			650				9	8					SK

Type Number	Device Type	Frequency Min. GHz	Frequency Max. GHz	Tuning Method	Bandwidth MHz	P_{IN} V	P_{IN} mA	P_O Min. *dbm mW	Max. Gain dB	Typical NF dB	Operating Temp. Ambient (-)°C	Operating Temp. Ambient (+)°C	Volume in^3	Weight oz.	Manufacturer
28670 SERIES	OSC	0.1	1.0	VT		20	150	500			0	71	/2	1.3	OS
S-1001	OSX	0.1	0.5			28		150W			40	71	24	14.0	AC
FS-56	OSC	0.2	1.5			100	30	10			55	90			FR
D21J52-243	TOS	0.2	0.3	VT		28	250	40							SP
D21J51-190	TOS	0.2	0.2	MC		24	20	100							SP
D21J51-252	TOS	0.2	0.3	MC		24	20	100							SP
ETS3371-2	OSC	0.2	0.5	VT		28		150							MP
FS-56H	OSC	0.2	1.2			100	30	150			55	90	/3	•	FR
TS3371-2	OSC	0.2	0.5	MC				250							MP
28671-60	OSC	0.2	0.5	VT				400			54	71	1	1.3	OS
VTS-25	OSC	0.2	0.5	VT		-30	150	750			30	60	/3	6.0	TC
SXM-215	TOS	0.2	0.2	MC		40	160	1000					25		MS
SXT-215	TOS	0.2	0.2	VT		40	160	1000					25		MS
FS-2M	OSC	0.2	0.6	VT		60	300	1000			10	70	/4		FR
FS-146	OSC	0.2	0.5	MC		40	300	2000			55	71	/4		FR
VCO3081	OSC	0.3	0.4			10	9	1			45	85			AL
FS-216	OSC	0.3	0.5			15	800	10			55	85	5		FR
4210	OSX	0.3	0.5			15	50	10					/4		ZL
FS-6	OSC	0.3	1.8	VT		100	30	20			55	90	/3		FR
D21J52-300	TOS	0.3	0.4	VT		28	250	40							SP
6003-1004	OSC	0.3	0.4	MC				50			25	75			TR
D21J51-282	TOS	0.3	0.3	MC		24	20	100							SP
D21J51-342	TOS	0.3	0.4	MC		24	20	100							SP
WJ2811	OSC	0.3	0.5	VT		24	200	100					4	6.0	WJ
FS-6H	OSC	0.3	1.8			100	30	100			55	90	/3		FR
28651-18	OSC	*0.3		MC				400			54	71	1	1.3	TR
PM7104	OSC	0.3	0.5			50	200	500				55			AI
4222	OSX	*0.3				28	250	1500					11		ZL
4230	OSX	*0.3				28	250	1500					11		ZL
S185	OSC	0.3	0.3	VT		28		8000					11	12.0	RC
S193	OSC	0.3	0.4			28		25W					24	12.0	RC
S178	OSC	0.3	0.4	FX		28	4	40W					50	25.0	RC
6003-1010	OSC	0.4	0.5	MC				25			20	70			TR
D21J52-309	TOS	0.4	0.4	VT		28	250	40							SP
D21J52-450	TOS	0.4	0.6	VT		28	250	40							SP
D21J51-414	TOS	0.4	0.5	MC		24	20	100							SP
SX1-400	TOS	0.4	0.4	VT		40	160	750					25		MS
SXM-400	TOS	0.4	0.4	MC		40	160	1000					25		MS
5004-1000	OSC	0.4	0.5	MC		16		1W			54	70			TR
SSP6	OSC	0.4	0.9					1500			20	50	15	15.9	GC
S142	OSC	0.4	0.4					8000			15	57	26	22.4	RC
VTN-2-5	OSC	0.5	4.0	VT		28	60				30	70	/3	1.5	EF
SS107	TDO	0.5	2.0	FX	20			2					8	6.0	RC
OP-100	TOS	0.5	1.0			15	50	5			20	60	/6	8.0	PE
VTO-2-5	OSC	0.5	4.0	VT				5			30	70	/3	1.5	EF

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	≜dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
VTM-1-7	OSC	0.5	4.0	VT		28	60	5			30	70	/3	1.5	EF
WJ-571	TOS	0.5	1.0	VT		28	45	10			50	65	3	9.0	WJ
4211	OSX	0.5	1.0			15	65	10					/5		ZL
TS-11-18	OSC	0.5	4.0	MC		28	80	10			30	70	/5	1.5	EF
TSO-11-15	OSC	0.5	4.0	MC		28	80	10			30	70	/5	1.5	EF
4213	OSX	0.5	5.5			15	200	10					8		ZL
FS-21CLP	OSC	0.5	1.5			15		20			55	85	/13		FR
2041A	OSC	0.5	1.0			24	200	20			20	70	/12	32.0	KS
FS-5	OSC	0.5	1.8	MC		20	125	25			0	60	2		FR
6003-1000	OSC	0.5	0.8	MC		18	18	25			25	75	1	1.5	TR
MVP-1000	OSC	0.5	1.0	VT		20	140	50			30	60	4	6.0	FS
FS-39	OSC	0.5	2.0			28		70			55	85	45		FR
5004-1001	OSC	*0.5		MC				100			54	100			TR
VFF/L10	TOS	0.5	1.0	VT	7	20	35	100			20	50	27		FE
WJ2800	OSC	0.5	1.0	VT		24	200	100					4	6.0	WJ
28672-62	OSC	0.5	1.0	VT				100			54	71	1	1.3	OS
FS-8	OSC	0.5	1.8	MC		20	125	100			0	60	2		FR
ETS3751-2	OSC	0.5	1.0	VT		28		150					1		MP
FS-21CMP	OSC	0.5	2.0			28		175			55	85	/13		FR
MVP-1001	OSC	0.5	1.0	VT		20	140	200			30	60	4	6.0	FS
PM7100	OSC	0.5	1.0	VT				250			55	71	2	3.0	AI
PM7106	OSC	0.5	1.0			60	225	250				55			AI
S172	OSC	0.5	1.0	VT	25	20	60	250			55	71		2.0	RC
TS3751	OSC	0.5	1.0	MC	500			250							MP
28651-21	OSC	*0.5		MC		20	150	400			54	71	1	1.3	OS
PM7101	OSC	0.5	1.0	VT		50	200	500			55	71	2	3.0	AI
S163	OSC	0.5	1.0	MC	100	28	150	500			55	71	4	3.0	RC
VTS-50	OSC	0.5	1.0	VT		-30	120	500			30	60	/3	6.0	TC
FS-21CHP	OSC	0.5	2.0			28		1000			55	85	/13		FR
VFX/L10	TOS	0.5	1.0	VT	7	28	500	1w			40	70			FE
4231	OSX	*0.5				28	250	1500					11		ZL
S173	OSC	0.5	0.6	FX		35	600	2000			55	71	4	5.0	RC
5012-1000	OSC	*0.5		FX		28		6000			40	70	46		TR
6002-1000	OSC	0.6	0.8	MC		18	20	20			20	70	2	2.0	TR
6002-1001	OSC	0.6	0.8	MC				30			20	70	2	2.0	TR
621J52-550	TOS	0.6	0.7	VT		28	250	40							SP
28651-22	OSC	*0.6		MC		20	150	200			54	71	1	1.3	OS
OS1100	OSC	0.6	1.2	MC		28	250	500					2		AD
FS-2	OSC	0.6	1.2	VT		60	300	1000			10	70	/4		FR
FS-2-PL	OSX	0.6	1.4			50	400	1000			0	60	/35	20.0	FR
FS-2R	OSC	0.6	1.4	MC		40	300	1000			55	71	/4		FR
S-1002-SERIES	OSX	0.6	1.2			24		1W			30	60	21		AC
FS-2H	OSC	0.6	1.2	VT		60	300	2000			10	70	/4		FR
S184	OSC	0.6	0.7	VT		28		6000					25	20.0	RC
621J52-670	TOS	0.7	0.8	VT		28	250	40							SP

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
MO(L)100X	OSC	0.7	1.0	VT		20	350	80			30	60	25		FS
SS104	TUO	0.8	1.4	VT	50			4000					7	6.0	RC
FS-19	OSC	0.8	1.2	MC		20	125	10			0	60	1		FR
6004-1000	OSC	0.8	1.0	MC				15			0	70			TR
Q21J52-8820	TUS	0.8	1.0	VT		28	250	40							SP
PM7105	OSC	0.8	1.5			60	175	100				55			AI
PM7102	OSC	0.8	1.5			50	175	150				55			AI
28651-24	OSC	*0.8		MC		20	150	200			54	71	1	1.3	OS
SXM-750	TUS	0.8	0.8	MC		40	160	500					25		MS
SXT-750	TUS	0.8	0.8	VT		40	160	500					25		MS
S141	OSC	0.8	0.9					8000			15	57	36	25.0	RC
40080H	OSC	*0.8			48	28		8000		66	40	71	39	28.0	HA
5010-1301	OSC	0.9	4.3	FX		33	100	8			55	125	3	4.0	TR
MA-82L04	OSC	0.9	1.3	MC	200	28	40	10			40	71			MA
28450-38 TO 139	OSX	0.9	14.3				300	10							MM
MA82L03	OSC	0.9	1.3	MC	100	28	60	50			40	71			MA
28450-365 TO 605	OSX	0.9	14.3				375	50							MM
MC82L02	OSC	0.9	1.3	MC	100	20	80	100			40	71			MA
MS82L01	OSC	0.9	1.3	MC	100	28	100	250			40	71			MA
28450-10 TO 22	OSC	0.9	2.3			20	280	250			30	70	22	19.0	MM
SXM-900	TUS	0.9	1.0	MC		40	160	500					25		MS
SXT-900	TUS	0.9	1.0	VT		40	160	500					25		MS
TS3102-2	OSC	0.9	1.1	MC				1000							MP
ETS3102-2	OSC	0.9	1.1	VT	200	28		1W							MP
SS100	TUO	1.0	1.4	MC				5000					18	16.0	RC
S241	OSC	1.0	1.6	VT		20	100				50	90	4		RC
5001-9000	OSC	1.0						3			20	70			TR
DL-103	TUS	1.0	2.0			15	50	5			20	60	76	8.0	PE
WJ-569	TUS	1.0	2.0	VT		28	60	10			30	65	3	9.0	WJ
WJ-569-3	TUS	1.0	2.0	VT		28	60	10			30	65	3	9.0	WJ
ETS3152	OSC	1.0	2.0	VT	1K	28		15							MP
TS3152	OSC	1.0	2.0	MC	1K			15							MP
ETS3152-3	OSC	1.0	2.0	VT				15							MP
TS3152-3	OSC	1.0	2.0	MC				15							MP
2042A	OSC	1.0	2.0			24	200	20			20	70	78	32.0	KS
6001-1100	OSC	1.0	1.0	MC		28	15	20			0	70		7.0	TR
28673-64	OSC	1.0	2.0	VT				25			54	71	1	1.3	OS
WJ2802	OSC	1.0	2.0	VT		15	250	30					4	6.0	WJ
VFF/L20	TUS	1.0	1.6	VT	20	20	35	40			20	50			FE
WJ2803	OSC	1.0	2.0	VT		15	250	40					4	6.0	WJ
AXO-10	OSC	1.0				28	140	50			35	90			AT
MVL2011	OSC	1.0	2.0	VT		20	80	50			30	60	1	4.0	FS
28770 SERIES	OSC	1.0	5.0	VT		20	200	50			0	71	2	1.8	OS
28652-25	OSC	*1.0		MC		20	100	100			54	71	1	1.3	OS
TS3122-2	OSC	1.0	1.5	MC	500			100							MP

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	cz.	
MVE-2000	OSC	1.0	2.0	VT		20	80	100			30	60	2	4.0	FS
PM7120	OSC	1.0	2.0			100	150	150				55			AI
PM7121	OSC	1.0	2.0			100	150	150				55			AI
200402005	OSC	1.0	2.0					150					/3		AS
MO(L)-102	OSC	1.0	1.1	MC		-20	120	250			30	60	7	8.0	FS
MO(L)-102A	OSC	1.0	1.1	MC		20	300	250			30	60	26	15.0	FS
VTS-100	OSC	1.0	2.0	VT		-20	150	250			30	60	/3	6.0	TC
SXM-1000	TOS	1.0	1.1	MC		40	160	300					25		MS
SXT-1050	TOS	1.0	1.1	VT		40	160	300					25		MS
4232	OSX	*1.0				28	250	1000					11		ZL
4242	OSX	*1.0				28	250	1000					11		ZL
111001V	OSC	1.0	1.2	ME		28	150	1W			55	71	4	10.0	CL
VFA/L20	TOS	1.0	1.6	VT	20	28	500	1W			40	70			FE
5012-1100	OSC	1.0		FX				4000			40	70	46		TR
D21L2-1	OSC	1.0				28		7W			20	50			SP
D21J2-2	OSC	1.0				28		7W			20	50			SP
D21L2-3	OSC	1.0				28		7W			20	50			SP
CA4L1	GOS	1.0	1.5			100	5A	25W					/1		CA
CA4L2-E	GOS	1.0	1.5			200	10A	100W					/1		CA
5000-1100	OSC	1.1	1.3	MC		28	150	10			20	70	10	9.5	TR
6009-1100	OSC	1.1	1.1	MC				15			54	71			TR
PM7004	OSC	1.1	1.2	MC	10	22	125	220			55	125		8.0	AI
MO(L)-104	OSC	1.1	1.2	MC		20	120	250			30	60	7	8.0	FS
MO(L)-104A	OSC	1.1	1.2	MC		20	300	250			30	60	26	15.0	FS
S227	OSC	1.1		MC	10	28	6	2000			0	75			RC
S179	OSC	1.1	1.3	MC		28		10W					60	16.0	RC
FS-26	OSC	1.2	1.5			24	80	10			30	71	/4		FR
FS-19A	OSC	1.2	1.8	MC		20	125	10			0	60	1		FR
WJ-569-6	TOS	1.2	2.2	VT		28	60	10			30	65	3	9.0	WJ
WJ-569-8	TOS	1.2	2.2	VT		28	60	10			30	60	3	9.0	WJ
6001-1102	OSC	1.2	2.2	MC				15			0	70		7.0	TR
FS-50	OSC	1.2	2.8			100	30	40			55	90	/3		FR
ETS315Z-2	OSC	1.2	1.8	VT	600	28		50							MP
TS315Z-2	OSC	1.2	1.8	MC	600			50							MP
28655-26	OSC	*1.2		MC		20	100	100			54	71	1	1.3	OS
PM7006	OSC	1.2	1.3	MC	150	22	190	190			55	125	6	8.0	AI
S190	OSC	1.2	1.9	MC	10	20	90	200			0	70		3.0	RC
MO(L)-106	OSC	1.2	1.3	MC		20	120	250			30	60	7	8.0	FS
MO(L)-106A	OSC	1.2	1.3	MC		20	300	250			30	60	26	15.0	FS
D21L50	OSC	1.2	1.4	VT		28		600			0	55	72	52.0	SP
S199	TOM	1.2			15	18	100	750							RC
S140	OSC	1.2	1.3					4000			15	57	36	27.5	RC
S183	OSC	1.2	1.4	VT		28		4000					34	28.0	RC
OL-102	TOS	1.3	2.3			15	50	5			20	80	/6	8.0	PE
MS-82L07	OSC	1.3	1.8	MC	200	28	60	10			40	71			MA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
WJ-569-9	TUS	1.5	2.3	VT		26	60	10			30	65	3	9.0	WJ
WJ-569-10	TUS	1.5	1.8	VT		26	60	25			30	65	3	9.0	WJ
MS-82L06	OSC	1.5	1.8	MC	150	26	80	50			40	71			MA
MS82L05	OSC	1.5	1.6	MC	100	26	100	100			40	71			MA
PM7002	OSC	1.5	1.5	MC	10	22	125	150			55	125	6	8.0	AI
MV(L)-108	OSC	1.5	1.5	MC		20	120	200			30	60	7	8.0	FS
MV(L)-108A	OSC	1.5	1.5	MC		20	300	200			30	60	26	15.0	FS
2043A	OSC	1.4	2.4			24	200	20			20	70	79	32.0	KS
WJ2810	OSC	1.4	2.4	VT		15	250	40					4	6.0	WJ
S127V2	OSC	1.4	2.3	MC	10	30	225	1100			55	71	16	6.0	RC
2004020001	OSC	1.4	2.5					100					12		AS
FS-28	OSC	1.5	2.3			24	80	10			30	71	3		FR
AXV-15	OSC	1.5				26	140	20			55	90			AT
5004-1300	OSC	1.5	3.0	VT		26		50			40	70	3	4.0	TR
PM7001	OSC	1.5	1.6	MC	150	22	125	110			55	125	6	8.0	AI
MV(L)-110	OSC	1.5	1.7	MC		20	120	150			30	60	7	8.0	FS
MV(L)-110A	OSC	1.5	1.7	MC		20	300	150			30	60	26	15.0	FS
5000-1101	OSC	1.6	2.1	MC				10			20	70	10	9.5	TR
6001-1101	OSC	1.6	2.0	MC				20			0	70		7.0	TR
VFF/S10	TUS	1.6	2.5	VT	40	20	35	30			20	50			FE
PM7005	OSC	1.6	1.6	MC	10	22	125	75			55	125		8.0	AI
S200	OSC	1.6	2.0	MC	100	20	100	200							RC
P8001	OSC	1.6	2.2			26	250	200			10	70			PL
FS-165	OSC	1.6	1.8	MC		12	300	250			55	71	71		FR
VFA/S10	TUS	1.6	2.5	VT	40	26	500	400			40	70			FE
P8005	OSC	1.6	2.2			28	10M	1000			0	60			PL
40160H	OSC	*1.6			80	26		4000		66	40	71	39	28.0	HA
MV(L)-112	OSC	1.7	2.0	MC		20	120	75			30	60	7	8.0	FS
MV(L)-112A	OSC	1.7	2.0	MC		20	300	75			30	60	26	15.0	FS
S170	OSC	1.7		MC	10	20	160	220			0	70		2.5	RC
S170V100	OSC	1.7		MC	10	20	160	220			0	70		2.5	RC
MS-82503	OSC	1.8	3.2	MC	200	26	60	5			28	71			MA
5004-1100	OSC	1.8	1.8	MC				10			54	55			TR
FS-25	OSC	1.8	2.5	VT	200	100	30	10			55	90	73		FR
MS-82502	OSC	1.8	3.2	MC	200	26	80	20			40	71			MA
28653-28	OSC	*1.8		MC		20	100	50			54	71	1	1.3	OS
MS-82501	OSC	1.8	3.2	MC	100	26	100	50			40	71			MA
6041-1100	OSC	1.8	1.8	VT		15	750	2W			55	85	13		TR
S208	OSC	1.9	2.2	VT		27		50			30	60	5	4.5	RC
28650 SERIES	OSC	*2.0		MC		20	150				20	71	12	1.3	OS
OS-100	TUS	2.0	4.0			15	50	2			20	60	75	8.0	PE
WJ-572-1	TUS	2.0	3.0	VT		28	60	*5			30	65	3	9.0	WJ
5000-1103	OSC	2.0						10			54	71			TR
MIC3068-1	TUS	2.0	2.3			1	15	10			55	75	1	1.6	AL
FS-31	OSC	2.0	3.0			24	80	10			30	71	3		FR

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-PC	(+PC	in^3	oz.	
2044A	OSC	2.0	4.0			24	200	10			20	70	/6	32.0	KS
35009A	TOS	2.0	4.0	ME		20	100	10			54	50	16	17.0	HP
FS-30A	OSC	2.0	2.5			+15		15			55	85	/12		FR
FS-4R	OSC	2.0	4.0	MC		20	125	15			0	60	3		FR
FS-47	OSC	2.0	4.0			100	30	15			55	90	/3		FR
MVS4001	OSC	2.0	4.0			20	150	20			30	60	2	3.0	FS
PM7242	OSC	2.0	4.0			100	150	20				55			AI
PM7243	OSC	2.0	4.0			100	150	20				55			AI
FS-9R	OSC	2.0	6.0	MC		20	125	20			0	60	2		FR
WJ2804	OSC	2.0	4.0	VT		15	200	20					4	6.0	WJ
AV-7200M	OSC	2.0	4.0			20	125	25					/5	18.0	AV
PM7240	OSC	2.0	4.0			100	150	40				55			AI
PM7241	OSC	2.0	4.0			100	150	40				55			AI
WJ2805	OSC	2.0	4.0	VT		15	200	40					4	6.0	WJ
FS-3R	OSC	2.0	4.0	MC		20	125	60			0	60	3		FR
MO(S)-114	OSC	2.0	2.3	MC		20	120	75			30	60	5	8.0	FS
MO(S)-114A	OSC	2.0	2.3			20	300	75			30	60	26	15.0	FS
5000-1303	OSC	2.0						100			0	77			TR
200400000	OSC	2.0	4.0			24	225	100			54	71	/3	2.0	AS
200402000	OSC	2.0	4.0					100					/3		AS
4243	OSX	*2.0				28	250	500					11		ZL
MS-82504	OSC	2.0	2.1	MC		28	1W	1000							MA
D21S2-1	OSC	2.0				28		3W							SP
D21S2-2	OSC	2.0				28		3W							SP
A-7369-J1	OSC	2.1				22	150	5			45	85	19	1.5	ML
O-2	OSC	2.1	2.2	ME	28	100		100			20	55			SK
S176	OSC	2.1	2.3	FA		28		5000					60	25.0	RC
D21S2-3	OSC	2.1				28		3W							SP
6000-1307	OSC	2.2	2.7	ME				10			0	95	2	4.0	TR
F8003	OSC	2.2	2.3			28	65	15			0	50		8.5	PL
28653-29	OSC	*2.2		MC		20	100	50			54	71	1	1.3	OS
D21050	OSC	2.2	2.4	VT		28		200			0	55	72	55.0	SP
S21S50	OSC	2.2	2.4	VT		28		*200			0	55	72	55.0	SP
FS-31S	OSC	2.3	3.2			24	80	10			30	71	3		FR
MO(S)-116	OSC	2.3	2.7	MC		20	120	20			30	60	3	2.5	FS
MO(S)-116A	OSC	2.3	2.7			20	300	20			30	60	26	15.0	FS
FS-14A	OSC	2.3	2.9		325	60	300	250			10	70	12		FR
40220H	OSC	*2.3			100	28		2000		66	40	71	39	33.0	HA
WJ-572-2	TOS	2.4	3.4	VT		28	60	*5			30	65	3	9.0	WJ
FS-14R	OSC	2.4	3.5	MC		40	300	500			55	71	8		FR
FS-14R-PL	OSX	2.4	3.5			50	400	500			0	60	/35	20.0	FR
S139	OSC	2.4	2.6					2500			15	57	36	27.5	RC
FS-30	OSC	2.5	5.0			+15		10			55	85	/12		FR
FS-23	OSC	2.5	5.0			100	30	15			55	90	/5		FR
VFF/S20	TOS	2.5	4.0	VT		20	35	20			20	50			FE

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
FS-29A	OSC	2.5	5.0			+28		25			30	71	/51		FR
FS-30MP	OSC	2.5	5.0			+28		60			55	85	/12		FR
VFA/S20L	TOS	2.5	3.0	VT	55	28	500	300			40	70			FE
3182	OSC	2.5	2.8	VT		28		2000					39	28.0	RC
20040200B3	OSC	2.6	5.2					10					2		AS
6000-1301	OSC	2.6	2.8	VT				50			20	70			TR
6000-1300	OSC	2.7	3.0	ME		28	15	15			0	95	2	4.0	TR
MS55	OSC	2.7	3.2	MC	28	25	100	20			55	100	3	.	FS
MO(S)-118	OSC	2.7	3.2	MC		20	120	20			30	80	3	2.5	FS
MO(S)-118A	OSC	2.7	3.2			20	300	20			30	80	26	15.0	FS
MS-1222A	OSC	2.7	3.2	MC		20	50	20			55	85	3	2.5	FS
6000-1303	OSC	2.8	3.2	MC				15			0	70			TR
U-3	OSC	2.8	3.1	ME	28	100		100			20	55			SK
FS-14B	OSC	2.8	3.3	VT	400	60	300	200			10	70	12		FR
6000-1302	OSC	2.9	3.1	MC				10			0	95			TR
5004-1301	OSC	2.9		FA				50			54	70			TR
5003-1303	OSC	2.9	3.1	VT				50			20	70			TR
FS-31A	OSC	3.0	4.0			24	80	10			30	71	3		FR
5003-1301	OSC	3.0	3.2	VT				50			20	70			TR
VFA/S20U	TOS	3.0	4.0	VT	70	28	500	200			40	70			FE
CA4S1-B	GUS	3.0	3.6			90	2A	5W					/1		CA
CA4S1-P	GUS	3.0	3.6			60	3A	5W					/1		CA
CA4S2	GUS	3.0	3.6			100	20A	5W					/1		CA
6000-1305	OSC	3.1	3.4	ME				15			0	95	2	4.0	TR
FS-14C	OSC	3.1	3.6	VT	450	60	300	200			10	70	12		FR
6000-1306	OSC	3.2	3.6	ME				8			0	95	2	4.0	TR
MO(S)-120	OSC	3.2	3.7	MC		20	120	10			30	80	3	2.5	FS
MO(S)-120A	OSC	3.2	3.7			20	300	10			30	80	26	15.0	FS
FS-27M	OSC	3.2	6.0			24	80	20			30	71	/4		FR
6006-1300	OSC	3.2	3.4	VT				50			20	70			TR
40320M	OSC	*3.2			160	28		100		66	40	71	39	33.0	HA
AXO-35	OSC	3.5				28	140	5			35	90			AT
5003-1302	OSC	3.5	3.7	VT				50			20	70			TR
40350M	OSA	*3.5						100						16.0	HA
FS-14D	OSC	3.5	4.3	VT	500	60	300	200			10	70	5		FR
FS-14L	OSC	3.5	6.0	MC		40	300	400			55	71	5		FR
FS-14L-PL	OSA	3.5	6.0			50	400	200			0	60	/35	20.0	FR
AFO36	OSC	3.6	3.9	MC		20	300	10			30	60	9		AT
APO36	OSC	3.6	3.9	MC		20	400	10			30	60	38		AT
MS(S)-42	OSC	3.6	3.9	MC		20	300	10			30	60	/6	17.0	FS
MS(S)-42A	OSC	3.6	3.9	MC		20	400	10			30	60	30	30.0	FS
PA41P	OSC	3.6	4.1	MC		20	300	10			30	60	/3	30.0	CM
PM7301	OSC	3.6	4.1	VT	20			10			30	60	36	27.0	AI
28450-38 To 139	OSC	3.6	14.2				200	10					25	23.0	MM
AFO36M	OSC	3.6	3.9			20	300	50			30	60	9		AT

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-Pc	(+Pc	in^3	oz.	
APU36H	OSC	3.6	3.9	MC		20	400	50			30	60	38		AT
MS(S)-420X	OSC	3.6	3.9	MC		20	400	50			30	60	30	30.0	FS
28450-385 TO 665	OSC	3.8	6.8				280	50					25	23.0	MM
2000402006	OSC	3.6	4.3					150					2		AS
AFU38	OSC	3.8	4.2	MC		30	300	10			30	60	9		AT
APU38	OSC	3.8	4.1	MC		20	400	10			30	60	38		AT
MS(S)-44	OSC	3.8	4.2	MC		20	400	10			30	60	76	17.0	FS
MS(S)-44X	OSC	3.8	4.2	MC		20	400	10			30	60	30	30.0	FS
AFU38H	OSC	3.8	4.2			20	300	50			30		9		AT
APU38H	OSC	3.8	4.1	MC		20	400	50			30	60	38		AT
MS(S)-440X	OSC	3.8	4.2	MC		20	400	50			30	60	30	30.0	FS
FS-1R	OSC	4.0	6.5	MC		20	125	7			0	60	2		FR
FS-37A	OSC	4.0	4.5			24	80	10			30	71	4		FR
VFF/C10	TVS	4.0	7.5	VI	104	20	35	15			20	50			FE
5003-1600	OSC	4.0	4.2	VI				50			20	70			TR
C-4	OSC	4.0	4.4	ME	28	100		80			20	55			SK
VFA/C10	TVS	4.0	7.5	VI	104	28	500	*150			40	70			FE
4244	OSX	*4.0				28	250	400					11		ZL
AFU41	OSC	4.1	4.4	MC		20	300	10			30	60	9		AT
APU41	OSC	4.1	4.4	MC		20	400	10			30	60	38		AT
PM7302	OSC	4.1	4.4	VI	20			10			30	60	36	27.0	AI
MS(C)-46	OSC	4.1	4.4	MC		20		10			30	60	6	17.0	FS
MS(C)-46X	OSC	4.1	4.4	MC		20		10			30	60	30	30.0	FS
AFU41H	OSC	4.1	4.4			20	300	50			30	60	9		AT
APU41H	OSC	4.1	4.4	MC		20	400	50			30	60	30		AT
MS(S)-460X	OSC	4.1	4.4	MC		20	400	50			30	60	30	30.0	FS
40410H	OSC	*4.1			200	28		50		66	40	71	39	28.0	HA
S195	TUM	4.2	5.2	MC	25	18								5.0	RC
FS-14E	OSC	4.2	4.9	VI	500	60	300	175			10	70	5		FR
U2126-8	OSC	4.2	4.3			28	325	300					15	18.0	SP
AFU43	OSC	4.3	4.9	MC		20	300	10			30	60	9		AT
APU43	OSC	4.3	4.9	MC		20	400	10			30	60	38		AT
MS(C)-48	OSC	4.3	4.9	MC		20		10			30	60	6	17.0	FS
MS(C)-48X	OSC	4.3	4.9	MC		20		10			30	60	30	30.0	FS
PA49P	OSC	4.3	4.9	MC		20	300	10			30	60	75	30.0	CM
PM7303	OSC	4.3	4.9	VI	20			10			30	60	36	27.0	AI
AFU43H	OSC	4.3	4.9			20	300	50			30	60	9		AT
MS(C)B-480X	OSC	4.3	4.6	MC		20	400	50			30	60	30	30.0	FS
APU43	OSC	4.3	4.9	MC		20	400	50			30	60	38		AT
APU43H	OSC	4.3	4.9	MC		20	400	50			30	60	38		AT
MS(C)A-480X	OSC	4.3	4.9	MC		20	400	50			30	60	30	30.0	FS
MS60	OSC	4.4	4.9	MC	40	25	125	10			55	100	6	79.0	FS
MA-82607	OSC	4.4	5.0	MC		28	250	250							MA
FS-37A	OSC	4.5	4.9			24	80	10			30	71	4		FR
40450H	OSX	*4.5						40						20.0	HA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-Pc	(+Pc	in^3	oz.	
MS(C)540X	OSC	4.8	4.9	MC		20	400	50			30	60	30	30.0	FS
FS-18	OSC	4.8	11.0		500	100	30	25			55	90	3		FR
40460H	OSC	*4.8			240	28		50		66	40	71	39	33.0	HA
5138	OSC	4.8	5.2					1250			15	57	36	27.5	RC
FS-37A	OSC	4.9	5.4			24	80	10			30	71	4		FR
FS-14F	OSC	4.9	5.6	VT	600	60	300	125			10	70	5		FR
0212C51	OSC	5.0	6.0	VT		24		5			0	5			SP
FS-29B	OSC	5.0	10.0			+28		5			55	85	/51		FR
FS-34	OSC	5.0	10.0			+28		5			55	85	/12		FR
4214	OSX	5.0	10.0			15	350	10					/9		ZL
FS-40	ADO	5.0	12.4			90	40	10			40	70	2		FR
FS-42	OSC	5.0	12.4			90	40	10			40	70	2		FR
FS-34HP	OSC	5.0	10.0			+28		15			55	85	/12		FR
ATIO	ADO	5.0	10.5			110	40	100			15	55	/1	/0.4	SP
5177	OSC	5.0	5.5	VT		28		1000					39	28.0	RC
A-7366-02	OSC	5.2						5			45	85	19	1.5	ML
MS105A	OSC	5.4	5.9	MC	500	25	100	3			55	100	2	/5.0	FS
MS105B	OSC	5.4	5.9	MC	500	25	100	3			55	100	2	/5.0	FS
MA-82603	OSC	5.4	5.9	MC	500	28	100	5			40	71			MA
AFO54	OSC	5.4	5.9	MC		20	300	10			30	60	9		AT
APO54	OSC	5.4	5.9	MC		20	400	10			30	60	38		AT
FS-37A	OSC	5.4	5.9			24	80	10			30	71	4		FR
MA-82602	OSC	5.4	5.9	MC	300	28	100	10			40	71			MA
MS100	OSC	5.4	5.9	MC	56	25	125	10			55	100	8	/9.0	FS
MS(C)-52	OSC	5.4	5.9	MC		20		10			30	60	6	17.0	FS
MS(C)-52X	OSC	5.4	5.9	MC		20		10			30	60	30	30.0	FS
PM7304	OSC	5.4	5.9	VT	20			10			30	60	36	27.0	AI
MA-82601	OSC	5.4	5.9	MC	100	28	100	30			40	71			MA
0212C50	OSC	5.4	5.9	VT		24		40			0	55	72	64.0	SP
AFO54H	OSC	5.4	5.9			20	300	50			30	60	9		AT
APO54H	OSC	5.4	5.9	MC		20	400	50			30	60	38		AT
FS-14G	OSC	5.4	6.0	VT	600	60	300	100			10	70	5		FR
40550H	OSX	*5.5						40						20.0	HA
AFO58	OSC	5.6	6.4			20	300	10			30	60	9		AT
APO58	OSC	5.8	6.4	MC		20	400	10			30	60	38		AT
MS(C)-54	OSC	5.8	6.4	MC		20		10			30	60	6	17.0	FS
MS(C)-54X	OSC	5.8	6.4	MC		20		10			30	60	30	30.0	FS
MS(C)-56X	OSC	5.8	6.4	MC		20		10			30	60	30	30.0	FS
AFO58H	OSC	5.8	6.4			20	300	50			30	60			AT
AFO58H	OSC	5.8	6.4			20	300	50			30	60			AT
MS110	OSC	5.9	6.4	MC	62	25	125	5			55	100	8	/9.0	FS
MA-82606	OSC	5.9	7.1	MC	500	28	100	5			40	71			MA
FS-37B	OSC	5.9	6.5			24	80	10			30	71	4		FR
PA64P	OSC	5.9	6.5	MC		20	300	10			30	60	/3	30.0	CM
PM7305	OSC	5.9	6.5	VT	20			10			30	60	36	27.0	AI

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
MA-82605	GSC	5.9	7.1	MC	300	28	100	10			40	71			MA
MA-82608	GSC	5.9	6.4	MC		28	20	20							MA
MS-82604	GSC	5.9	7.1	MC	100	28	100	20			40	71			MA
MA-82609	GSC	5.9	6.4	MC		28	500	500							MA
AU-SERIES	IPO	8.0	12.0			90	70	50					/2	8.0	OK
P8500	AUO	8.0	11.0	MC		100	25	60			40	85	/1	1.5	PL
4245	GSX	*8.0				28	250	200					11		ZL
4255	GSX	*8.0				28	250	200					15		ZL
U212C2-1	GSC	8.0				28		1W							SP
U212C2-2	GSC	8.2				28		1W							SP
MS(C)560X	GSC	8.3	8.8	MC		20	400	50			30	60	30	30.0	FS
U212C2-3	GSC	8.3				28		1W							SP
AFU64	GSC	8.4	8.9			20	300	10			30	60	9		AT
APU64	GSC	8.4	8.9	MC		20	400	10			30	60	38		AT
FS-376	GSC	8.4	8.9			24	80	10			30	71	4		FR
MS(C)-56	GSC	8.4	8.9	MC		20		10			30	60	6	17.0	FS
PA69P	GSC	8.4	8.9	MC		20	300	10			30	60	/3	30.0	CM
PM7307	GSC	8.4	8.9	VT	20			10			30	60	36	27.0	AI
AF064H	GSC	8.4	8.9			20	300	50			30	60	9		AT
APU64H	GSC	8.4	8.9	MC		20	400	50			30	60	38		AT
40640H	GSC	*8.4			260	28		50		66	40	71	39	33.0	HA
AFU68	GSC	8.8	7.2			20	300	10			30	60	9		AT
APU68	GSC	8.8	7.2	MC		20	400	10			30	60	38		AT
MS(C)-58	GSC	8.8	7.2	MC		20		10			30	60	6	17.0	FS
MS(C)-58X	GSC	8.8	7.2	MC		20		10			30	60	30	30.0	FS
PA72P	GSC	8.8	7.2	MC		20	300	10			30	60	/3	30.0	CM
PM7309	GSC	8.8	7.2	VT	20			10			30	60	36	27.0	AI
FS-37C	GSC	8.8	7.3			24	80	10			30	71	4		FR
MS(C)-60	GSC	7.0	7.5	MC		20		5			30	60	6	17.0	FS
MS(C)-60X	GSC	7.0	7.5	MC		20		5			30	60	30	30.0	FS
PM7311	GSC	7.0	7.5	VT	20			5			30	60	36	27.0	AI
AFU75	GSC	7.5	8.0			20	300	10			30	60	9		AT
APU70	GSC	7.0	7.5	MC		20	400	10			30	60	38		AT
FS-37C	GSC	7.0	7.5			24	80	10			30	71	4		FR
PA77P	GSC	7.0	7.8	MC		20	300	10			30	60	/3	30.0	CM
FS-17K	GSC	7.0	10.0	MC		20	125	10			0	60	3		FR
FS-24K	GSC	7.0	18.0	MC		40	300	40			55	71	/7		FR
FS-24-PL	GSX	7.0	10.5			50	400	100			0	60	/35	20.0	FR
6001-1104	GSC	7.0	14.0	MC				100			0	70		7.0	TR
MS-82X03	GSC	7.1	11.0	MC	300	28	100	5			40	71			MA
MA-82X02	GSC	7.1	11.0	MC	200	28	100	10			40	71			MA
MS-82X01	GSC	7.1	11.0	MC	100	28	100	20			40	71			MA
40720H	GSC	*7.2			260	28		50		66	40	71	39	33.0	HA
A-7368-03	GSC	7.4						3			45	85	19	1.5	ML
FS-37U	GSC	7.5	8.0			24	80	5			30	71	4		FR

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-Pc	(+Pc	in^3	oz.	
MS(C)-62	OSC	7.5	8.0	MC		20		5			30	60	6	17.0	FS
MS(C)-62X	OSC	7.5	8.0	MC		20		5			30	60	30	30.0	FS
PM7312	OSC	7.5	8.0	VI	20			7			30	60	36	27.0	AI
AFO75	OSC	7.5	8.0			20	300	10			30	60	9		AT
APO75	OSC	7.5	8.0	MC		20	400	10			30	60	38		AT
LO-100	OSC	7.5	14.0			28	500	10			0	60			AP
VFF/X10	TUS	7.5	9.0	VI	165	20	35	10			20	50			FE
VFX/X10	TUS	7.5	9.0	VI	165	28	500	100			40	70			FE
PA84P	OSC	7.8	8.5	MC		20	300	10			30	60	/3	30.0	CM
O-9	OSC	7.8	8.2	ME	28	100		20			20	55			SK
MS(X)-64	OSC	8.0	8.5	MC		20	300	5			30	60	/6	17.0	FS
MS(X)-64X	OSC	8.0	8.5	MC		20	400	5			30	60	30	30.0	FS
PM7313	OSC	8.0	8.5	VI	20			5			30	60	36	27.0	AI
FS-37O	OSC	8.0	8.6			24	80	5			30	71	4		FR
CL8360	OSC	8.0	9.0	MC		7		5							MU
CL8401	OSC	8.0	10.0	MC	50	10		5							MU
CX111A	GUS	8.0	12.0			6		5		80	55	85			MU
VSX9005	GUS	8.0	12.4	MC		10	300	5						4.0	VA
SSX8	TUS	8.0	10.5			/18	100	8			20	60		8.0	GC
AFO79	OSC	8.0	8.5			20	300	10			30	60	9		AT
APO79	OSC	8.0	8.5	MC		20	400	10			30	60	38		AT
VSX9500OT	IPO	8.0	10.0	MC			40	10		/1					VA
CX111B	GUS	8.0	12.0			6		10		80	55	85			MU
CX111C	GUS	8.0	12.0			6		10		80	55	85			MU
OX-100	GUS	8.0	12.4			7	450	10					31	56.0	PE
O100WM	OSC	*8.0			500	5W		15			30	70	/2	3.5	IS
VSX9500	IPO	8.0	10.0				30	25		/1					VA
VSX-9500A	IPO	8.0	10.0	FX		60		25			20	70	2	4.0	VA
VSX-9500AT	IPO	8.0	10.0	MC		65		25							VA
VSX9001	GUS	8.0	12.4	MC		10	500	25						4.0	VA
FS-24	OSC	8.0	10.0	VI	500	60	300	40			10	70	/7		FR
40800H	OSC	*8.0			260	28		50		66	40	71	39	33.0	HA
VSX9500B	IPO	8.0	10.0				30	50		/1					VA
VSX-9500BT	IPO	8.0	10.0	MC		65		50							VA
VSX9500C	IPO	8.0	10.0				50	100		/1					VA
VSX-9500CT	IPO	8.0	10.0	MC		65		100							VA
44012H	AUO	8.0	12.4	ME		80		100			49	60	10	12.0	HA
VSX9500E	IPO	8.0	10.0				70	150		/1					VA
VSX9500ET	IPO	8.0	10.0				70	150		/1					VA
VXS9500F	IPO	8.0	10.0				80	200							VA
44010H	AUO	8.0	12.4	ME		80		250			49	60	10	12.0	HA
44013H	AUO	8.0	12.4	ME		80		500			49	60	10	12.0	HA
AVO1658	AUO	8.2	12.4			10	30				25	50	1		AL
X916	GUS	8.2	9.6			12	70	2			40	70		1.5	SS
X915	IPO	8.2	9.6	FX		60		10			40	70		1.5	SS

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
AV-9501	GUS	8.2	12.4			10		10					/6	9.0	AV
AV-9701	ADO	8.2	12.4			6w		10		10					AV
U5784	ADO	8.2	12.4			60	20	10					/1		SY
FS-40W	ADO	8.2	12.4			90	40	10			40	70	42		FR
FS-43	OSC	8.2	12.4			90	40	10			40	70	/2		FR
MA-4980	ADO	8.2	12.4			100	30	10		20			/1		MA
SYA-3200	ADO	8.2	12.4	MC	100	50		10			30	71	5		SY
SYA-3201	ADO	8.2	12.4	MC	100	70		10			30	71		.	SY
VSX9011	GUS	8.2	12.4	ME		10		10						4.0	VA
0125WV	OSC	*8.2			300	5w		15					/2	3.5	IS
AV-9502	GUS	8.2	12.4			11		25					/6	9.0	AV
U5784A	ADO	8.2	12.4			60	20	25					/1		SY
DA-1414A	GUS	8.2	12.4			12	500	25			55	150	/1		MO
SYA-3200A	ADO	8.2	12.4	MC	100	10	25	25			30	71	5		SY
SYA-3201A	ADO	8.2	12.4	MC	100	10	25	25			30	71			SY
X925	IPO	8.2	12.4			75	30	25			40	70		8.0	SS
AV-9503	GUS	8.2	12.4			13		50					/6	9.0	AV
U5784B	ADO	8.2	12.4			60	20	50					/1		SY
DA-1717B	GUS	8.2	12.4			12	500	50			55	150	/1		MO
MA-4986	ADO	8.2	12.4			100	40	50		20			/1		MA
SYA-3200B	ADO	8.2	12.4	MC	100			50			30	71	5		SY
SYA-3201B	ADO	8.2	12.4	MC	100			50			30	71			SY
AD-10 SERIES	IPO	8.2	12.4	MC		95	40	60			30	70	/2		OK
AV-9703	ADO	8.2	12.4			12w		100		10					AV
DA-2020C	GUS	8.2	12.4			12	500	100			55	150	/1		MO
FS-202	OSC	8.2	12.4			90	40	100			40	70	/2		FR
MA-4987	ADO	8.2	12.4			100	50	100		20			/1		MA
X935	IPO	8.2	12.4			75	50	100			40	70		8.0	SS
FS-18W	OSC	8.5	11.0		1K	100	30	1			55	90	3		FR
AXO-85	OSC	8.5				28	140	3			35	90			AT
420722	OSC	8.5	10.0			28	110	5			55	85			AT
CM1XM96	OSC	8.5	9.6			28	750	10			30	71	20	25.0	CM
5006-9901	OSC	8.5	9.8	ME		20	350	30			55	85	49		TR
FS-37U	OSC	8.6	9.2			24	80	5			30	71	4		FR
0175WV	OSC	*8.7			300	5w		15					/2	3.5	IS
U-7	OSC	8.7	9.3	ME	20	100		20			20	55			SK
CL8300	GUS	8.9	9.9		200	+10		3			40	85			MU
CL8310	GUS	8.9	9.9		200	+10		3			40	85			MU
CL8370	OSC	9.0	10.0	MC		10		5							MU
SS14	TUS	9.0	10.0	VT	250			8			20	60	8		GC
VFF/X20	TUS	9.0	12.0	VT	210	20	35	10			20	50			FE
MA-8000-FC	ADO	9.0	12.4					10							IM
MA-8001-FC	ADO	9.0	12.4					10							IM
0000WM	OSC	*9.0			500	5w		15			30	70	/2	3.5	IS
SSX1	OSC	9.0	10.0	VT				15			0	50		16.3	GC

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
VAU-12A	IPO	9.0	12.4			80		25					/1		VA
5008-9900	OSC	9.0	9.7	ME		20	350	50			55	85	48		TR
VAU-12B	IPO	9.0	12.4			80		50					/1		VA
VFA/X20	TOS	9.0	12.0	VT	210	28	500	100			40	70			FE
VAU-12C	IPO	9.0	12.4			80		100					/1		VA
CL8420	OSC	9.2	9.5	MC	50	10		3							MU
CL8440	OSC	9.2	9.5	MC	50	10		3							MU
CL8430	OSC	9.2	9.5	MC	50	10		5							MU
CL8450	OSC	9.2	9.5	MC	50	10		5							MU
FS-37E	OSC	9.2	9.8			24	80	5			30	71	4		FR
CL8460	OSC	9.2	9.5	MC	50	10		10							MU
CL8470	OSC	9.2	9.5	MC	50	10		10							MU
0025AV	OSC	*9.2			300	5W		15					/2	3.5	IS
40920H	OSC	*9.2			160	28		25		66	40	71	39	33.0	HA
5198	OSC	9.2	9.9	MC	50	24	200	100							RC
5232	OSC	*9.3		ME		12	320	8			30	70	/4	6.5	RC
AXU-95	OSC	9.5				28	140	3			35	90			AT
40960H	OSC	*9.6			800	28		25		66	40	71	39	33.0	HA
0075WV	OSC	*9.7			300	5W		15					/2	3.5	IS
FS-37E	OSC	9.8	10.4			24	80	5			30	71	4		FR
CL8380	OSC	10.0	11.0	MC		10		5							MU
CMAM107	OSC	10.0	10.7			28	750	10			30	71	20	25.0	CM
VSA9501BT	IPO	10.0	12.4				40	10							VA
4216	OSX	10.0	18.0					10							ZL
0R00WM	OSC	*10.0			500	5W		15			30	70	/2	3.5	IS
FS-24M	OSC	10.0	10.4	VT	400	60	300	25			10	70	/7		FR
VSA-9501A	IPO	10.0	12.4	FX		65		25							VA
VSA-9501AT	IPO	10.0	12.4	MC		65		25							VA
VSA-9501BT	IPO	10.0	12.4	MC		65		50							VA
VSA-9501C	IPO	10.0	12.4	FX		65		100							VA
VSA-9501CT	IPO	10.0	12.4	MC		65		100							VA
VSA9501E	IPO	10.0	12.4				70	150							VA
VSA9501ET	IPO	10.0	12.4				70	150							VA
VSA9501F	IPO	10.0	12.4				80	200							VA
0R25WV	OSC	*10.2			300	5W		15					/2	3.5	IS
MA-82X04	OSC	10.5	11.0	MC		28	20	20							MA
VSA9501B	IPO	*10.5					50	50							VA
BIU-003A	IPO	10.5	10.5	FX				60				100	3	4.0	VA
APU106	OSC	10.6	11.2			20	300	10			30	60	9		AT
APU106	OSC	10.6	11.2	MC		20	400	10			30	60	38		AT
MS(X)74	OSC	10.6	11.2			20	300	10			30	60	10	21.0	FS
MS(X)74X	OSC	10.6	11.2			20	300	10			30	60	34	34.0	FS
PA112P	OSC	10.6	11.2			20	300	10			30	60	54	30.0	CM
0A75WV	OSC	*10.7			300	5W		15					/2	3.5	IS
CL8390	OSC	11.0	12.0	MC		10		5							MU

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
OL00WM	OSC*	11.0			500	5w		15			30	70	/2	3.5	IS
AFU112	OSC	11.2	11.8			20	300	10			30	60	9		AT
APU112	OSC	11.2	11.8	MC		20	400	10			30	60	38		AT
MS(X)-76	OSC	11.2	11.8			20	300	10			30	60	10	21.0	FS
MS(X)76X	OSC	11.2	11.8			20	300	10			30	60	34	34.0	FS
PA117P	OSC	11.2	11.7			20	300	10			30	60	54	30.0	CM
AFU116	OSC	11.6	12.2			20	300	10			30	60	9		AT
APU116	OSC	11.6	12.2			20	300	10			30	60	9		AT
MS(X)78	OSC	11.6	12.2			20	300	10			30	60	10	21.0	FS
MS(X)78X	OSC	11.6	12.2			20	300	10			30	60	34	34.0	FS
OM00WM	OSC*	12.0			500	5w		15			30	70	/2	3.5	IS
4257	OSX*	12.0				28	250	100					15		ZL
AFU121	OSC	12.1	12.7			20	300	10			30	60	9		AT
APU121	OSC	12.1	12.7	MC		20	400	10			30	60	38		AT
MS(K)80	OSC	12.1	12.7			20	300	10			30	60	10	21.0	FS
MS(K)80X	OSC	12.1	12.7			20	300	10			30	60	34	34.0	FS
SSU9	TUS	12.4	14.0			28	100	5			20	60		8.0	GC
FS-49	OSC	12.4	18.0			+28		5			55	85	/24		FR
VSU-9006	GUS	12.4	15.0	MC	500	9	175	9			54	71	20	3.0	VA
VSU-9012	GUS	12.4	15.0	ME		10		10						3.0	VA
VSU-9502A	IPO	12.4	15.0	FX		32	125	10							VA
VSU-9502AT	IPO	12.4	15.0	MC		32	125	10							VA
FS-40R	OSC	12.4	18.0			90	40	10			40	70	1		FR
MA-4988	AUO	12.4	18.0			70	50	10		20			/1		MA
FS-35	OSC	12.4	18.0	VT	800	60	300	25			10	70	7		FR
VSU-9002	GUS	12.4	15.0	MC	500	10	300	36			54	71	20	3.0	VA
FS-35-PL	OSX	12.4	18.0			50	400	40			0	60	/35	20.0	FR
FS-35R	OSC	12.4	18.0	MC		40	300	40			55	71	/13		FR
VSU9502B	IPO	12.4	15.0				40	50							VA
VSU9502BT	IPO	12.4	15.0				40	50							VA
MA-4989	AUO	12.4	18.0			70	100	50		20			/1		MA
VSU9502C	IPO	12.4	15.0				60	100							VA
VSU9502CT	IPO	12.4	15.0				60	100							VA
VSU9502E	IPO	12.4	15.0				70	150							VA
VSU9502F	IPO	12.4	15.0				80	200							VA
P8006	OSC	12.5	14.0			28	800	300			0	50	84	44.0	PL
MS(K)82	OSC	12.6	13.2			20	300	5			30	60	10	21.0	FS
MS(K)82X	OSC	12.6	13.2			20	300	5			30	60	34	34.0	FS
AFU126	OSC	12.6	13.2			20	300	10			30	60	9		AT
APU126	OSC	12.6	13.2	MC		20	400	10			30	60	36		AT
PA132P	OSC	12.6	13.2			20	300	10			30	60	54	30.0	CM
MA-82K01	OSC	13.0	17.0	MC	200	28	100	3			40	71			MA
MS(K)84	OSC	13.1	13.7			20	300	5			30	60	/10	21.0	FS
MS(K)84X	OSC	13.1	13.7			20	300	5			30	60	34	34.0	FS
AFU131	OSC	13.1	13.8			20	300	10			30	60	9		AT

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
APU131	USC	13.1	13.8	MC		20	400	10			30	60	38		AT
P8007	USC*	13.3				28	2A	1W			0	70	84	44.0	PL
MS(K)86	USC	13.6	14.2			20	300	5			30	60	10	21.0	FS
MS(K)86X	USC	13.6	14.2	VT		20	400	5			30	60	51	34.0	FS
AFU136	USC	13.6	14.2			20	300	10			30	60	9		AT
APU136	USC	13.6	14.2	MC		20	400	10			30	60	38		AT
FS-46	USC	15.0	18.0		1M	100	30	5			55	70	/15		FR
VSU-9503A	IPO	15.0	18.0	FX		32	125	*5							VA
VSU-9503AT	IPO	15.0	18.0	MC		32	125	*5							VA
VSU-9007	GUS	15.0	18.0	MC	500	8	210	9			54	71	20	3.0	VA
VSU-9013	GUS	15.0	18.0	ME		10		10						4.0	VA
VSU9503BT	IPO	15.0	18.0				40	10							VA
VSU-9003	GUS	15.0	18.0	MC		10	425	15						4.0	VA
VSX-9003	GUS	15.0	18.0	MC				15							VA
VSU9503B	IPO	15.0	18.0				40	50							VA
VSU9503BT	IPO	15.0	18.0				40	50							VA
VSU9503C	IPO	15.0	18.0				40	100							VA
D21050	USC	15.9	17.0	VT		28		20			0	55	72	68.0	SP
S21050	USC	15.9	17.2	VT		28		*20			0	55	72	68.0	SP
P8004	USC	16.0	17.0			28	250	6			0	50		23.5	PL
8056-9200	USC	16.0	17.0	VT		30		15			55	85	21		TR
5000-9200	USC	16.5		FX				50			20	50			TR
4258	USX*	16.0				28	250	50					15		ZL
MA-4992	AUO	16.0	26.0			30	150	10		20			/1		MA
VSA-9004	GUS	18.0	26.5	MC	500	7	300	18			54	71	/1	4.0	VA
VSA9010	GUS	26.5	40.0	MC		70	500	10						2.0	VA
VSA-9010	USC	27.0	39.5	MC		6	500	10			54	71	/1	2.5	VA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
49340H	MOL					1w		50			54	85		18.0	HA
M-7	MOL	0.6	0.9					20							SK
M-4	MOL	0.6	0.9					80							SK
M-3	MOL	0.6	0.9					100							SK
M-2	MOL	0.6	0.9					100							SK
FS-178	MOL	1.2	1.4			20		200					21		FR
FS-156	MOL	*1.2				/3w		300					/14		FR
FS-155	MOL	*1.3				<00		/1					/14		FR
FS-195	MOL	*1.3				1w		100					7		FR
VSL9600A	MOL	1.8	2.0		90	20		10			30	70	/25		VA
VM-1825/50-19	MOL	1.8	1.9			/2w		100					32	48.0	AR
FM-100-1	MOL	*2.0				+28		300						24.0	AP
FM-100-2	MOL	*2.0				+28		/2W						24.0	AP
VSL9600B	MOL	2.0	2.1		25	-20		4			12	77	/66		VA
M-9	MOL	2.5	2.8					20							SK
VSS9601A	MOL	2.6	2.8		25	28		10			20	50	/35		VA
VSS9601B	MOL	2.6	2.8		25	28		1200			20	50	/53		VA
VSS9602A	MOL	3.0	3.5		30	28		10			10	60	/42		VA
FM-100	MOL	3.5	14.0			+28	650	25						24.0	AP
VM-3600-9	MOL	*3.6				700		50					35	48.0	AR
FS-174	MOL	3.9	4.1			1w		30					18		FR
VSL9620C	MOL	4.0	4.4		40	28		1200			20	50	/53		VA
VSL9603A	MOL	4.4	5.0		350	28		5			0	70	36		VA
VSL9603B	MOL	4.4	5.0		350			100			0	70	36		VA
FS-143	MOL	4.6	5.2			30		5					5		FR
SS1032	MOL	4.9	5.1		20	28	645	*-85					30	19.0	RC
FS-209	MOL	*5.0				100		10					5		FR
VSL9605A	MOL	5.0	5.4		50			10			20	50	/42		VA
VSL9604A	MOL	5.0	5.4		50			1000			20	50	45		VA
VSL9605B	MOL	5.5	6.0		50			10			20	65	/42		VA
VM-5800-15	MOL	*5.8				700		20					35	48.0	AR
FS-206	MOL	7.3	8.2			150		3					3		FR
VM-7850/500-8	MOL	7.6	8.1			2w		100					/14	21.0	AR
VSA9607A	MOL	8.5	9.6		250	28		5			30	70	/53		VA
VSA9608A	MOL	8.5	9.6		250	28		50			40	70	/53		VA
VSA9609A	MOL	8.5	10.5		85	28		100			20	60	42		VA
VSA9606A	MOL	8.5	9.5		85	28		500			20	50	/44		VA
S132	MOL	9.5	10.5		100			*-60					30	5.0	RC
VSA9610A	MOL	9.5	10.5		95	21		5			54	71	/38		VA
VSA9611A	MOL	9.5	10.5		250	28		50			20	60	/52		VA
VSA9610B	MOL	9.5	10.5		95	21		450			54	71	110		VA
FS-201	MOL	*10.5				30		2					3		FR
VSA9612A	MOL	*12.0			60	28		2			0	50	/53		VA
VSU9613A	MOL	12.8	13.5		125	28		5			54	71	/28		VA
VSU9614A	MOL	12.8	13.5		125	28		150			54	55	45		VA

Type Number	Device Type	Frequency		Tuning Method	Bandwidth	P_{IN}		P_O Min.	Max. Gain	Typical NF	Operating Temp. Ambient		Volume	Weight	Manufacturer
		Min. GHz	Max. GHz		MHz	V	mA	*dbm mW	dB	dB	(-)°C	(+)°C	in^3	oz.	
VSU9615A	MOL	12.8	15.0		65	28		500			20	50	/69		VA
VSU9616A	MOL	14.5	13.5		85	28		2			30	71	39		VA
VSU9616B	MOL	13.0	15.5		75	28		5			30	71	39		VA
VSU9616A	MOL	13.0	15.5		75	28		5			20	60	/35		VA
VSU9616C	MOL	13.0	16.0		150	28		100			30	71	/92		VA
VSU9617A	MOL	13.0	16.0		90	24		250			15	55	/69		VA
VSU9616D	MOL	16.0	18.5		150	28		2			30	71	39		VA
VSA9619A	MOL	31.0	36.0		150	28		5			30	70	54		VA

MISSION AND FUNCTIONS OF THE DEPARTMENT OF COMMERCE

"to foster, serve and promote the nation's economic development and technological advancement"

THE NATIONAL ECONOMIC GOAL

Sustained maximum growth in a free market economy, without inflation, under conditions of full employment and equal opportunity

THE DEPARTMENT OF COMMERCE

The historic mission of the Department is "to foster, promote and develop the foreign and domestic commerce" of the United States. This has evolved, as a result of legislative and administrative additions, to encompass broadly the responsibility to foster, serve and promote the nation's economic development and technological advancement. The Department seeks to fulfill this mission through these activities:

Participating with other government agencies in the creation of national policy, through the President's Cabinet and its subdivisions.

- **Cabinet Committee on Economic Policy**
- **Urban Affairs Council**
- **Environmental Quality Council**

Promoting progressive business policies and growth.

- **Business and Defense Services Administration**
- **Office of Field Services**

Assisting states, communities and individuals toward economic progress.

- **Economic Development Administration**
- **Regional Planning Commissions**
- **Office of Minority Business Enterprise**

Strengthening the international economic position of the United States.

- **Bureau of International Commerce**
- **Office of Foreign Commercial Services**
- **Office of Foreign Direct Investments**
- **United States Travel Service**
- **Maritime Administration**

Assuring effective use and growth of the nation's scientific and technical resources.

- **Environmental Science Services Administration**
- **Patent Office**
- **National Bureau of Standards**
- **Office of Telecommunications**
- **Office of State Technical Services**

Acquiring, analyzi and disseminating information concer ing the nation and the economy to he achieve increased social and economi benefit.

- **Bureau of the Census**
- **Office of Busines Economics**

NOTE: This schematic is neither an organization chart nor a program outline for budget purposes. It is a general statement of the Department's mission in relation to the national goal of economic development.

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